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3 IN RE: THE MEETING OF THE )  
4 BAY-DELTA ADVISORY COUNCIL )  
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10 TRANSCRIPT OF PROCEEDINGS

11 THURSDAY, JANUARY 29, 1998

12 SACRAMENTO CONVENTION CENTER

13 13th and K Streets

14 Sacramento, California 95814  
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22 DIAMOND COURT REPORTERS

23 1028 Second Street

24 Sacramento, California 95814

25 (916) 498-9288

Reported by: Patricia A. Hernandez, CSR #6875

# BAY-DELTA ADVISORY COUNCIL MEMBERS

<u>Name</u>	<u>Affiliation</u>
Mike Madigan	Chairperson California Water Commission
Sunne McPeak	Vice-Chairperson Bay Area Council
Jim Burnham	Designated State Official The Resources Agency
Roger Patterson	Designated Federal Official Bureau of Reclamation
. . . . .	
Tim Belza	Northern California Water Association
Roberta Borgonova	League of Women Voters of California
Don Bransford	Glenn-Colusa Irrigation Dist.
Byron Buck	Cal. Urban Water Agencies
E.Z. Burts	L.A. Area Chamber of Commerce
Dick Daniels	CALFED Management
Martha Davis	Sierra Nevada Alliance
Tom Decker	Cal. Chamber of Commerce
Hap Dunning	The Bay Institute
Jack Foley	Metropolitan Water District of Southern California
Roger Fontes	Northern Cal. Power Agency
Howard Frick	Friant Water Authority/Arvin Edison Water Supply District
Tom Graff	Environmental Defense Fund
David Guy	Cal. Farm Bureau Federation

## BAY-DELTA ADVISORY COUNCIL MEMBERS

(Cont.)

<u>Name</u>	<u>Affiliation</u>
Steve Hall	Asso. of Cal. Water Agencies
Eric Hasseltine	Contra Costa Council
Alex Hildebrand	South Delta Water Agency
Richard Izmirian	California Sportfishing Protection Alliance
Rosemary Kamei	Santa Clara Valley Water Dist.
Leland Lehman	California Waterfowl Asso.
Pat McCarty	Delta Protection Commission
Robert Meacher	Regional Council of Rural Counties
Ann Notthoff	Natural Resources Defense Council
Pietro Parravano	Pacific Coast Federation of Fishermen's Association
Stuart Pyle	Kern County Water Agency
Bob Raab	Save San Francisco Bay Asso.
Judith Redmond	Community Alliance with Family Farmers
Marcia Sablan	City of Firebaugh
Mike Stearns	San Luis Delta Mendota Water Authority
Roger Stelow	Dames and Moore
Roger Thomas	Golden Gate Fishermen's Asso.

1 (Above-entitled meeting called to order and the  
2 following proceedings were had at 9:05 a.m.)  
3

4 MR. MADIGAN: Let's see if we can  
5 take our seats. We are starting reasonably close to  
6 9:00 o'clock. We scheduled this for an early day since  
7 we have much to do. It looks like we are pretty close to  
8 a quorum here if we can just find everybody, find Judith.  
9 This morning we have much to do, and this is going to help  
10 us get through a long agenda.

11 The first item on the agenda this morning is  
12 the Chair's report. We are going to get a briefing today  
13 on the status of the schedule of the programmatic EIR/EIS.  
14 We are going to get a review concurrence hopefully on the  
15 CALFED Resource Water Management Strategy. It contains  
16 specific emphasis on the roll of demand management and the  
17 roll of --

18 In your packets you have a copy of the  
19 Environment Water Rights Hearing Caucus letter from of  
20 CALFED from last September urging a more thorough  
21 soft-path approach to demand management by CALFED, and  
22 everybody should have a copy of that.

23 You are going to have an idea of significant  
24 issues of CALFED which need to be addressed getting from  
25 the draft to the final.

1 You also have the draft Water Management  
2 strategy in your packet. That's not specifically an  
3 agenda item but it's a matter of some considerable  
4 interest, and I am going to take it under the Chair's  
5 report and invite your comments and your questions early  
6 on so that that doesn't linger. Staff is prepared to  
7 answer questions to the extent that staff is every  
8 prepared to answer questions on those sorts of things.

9 You also have status report of the water  
10 transfers work group which outlines a series of policy  
11 recommendations to CALFED addressing third-party impacts  
12 and ground water rights hearing impacts and transfers.

13 At that point Tip -- where is Tip? Is he  
14 here yet? All right. Well, he's late today because we  
15 are underway, and also Judith and Stu and Alex, you guys  
16 have been participants in the work group as I understand  
17 it and we will solicit comments from you.

18 We are not going to discuss the Wetlands issue.  
19 Tom has asked that that be put over to March to do that.  
20 I understand that Roger is not going to be here today and  
21 Patrick; and Tom Graff is here at the end of the table,  
22 and is here as the Federal Representative. Let's see  
23 here.

24 You have a 1998 BDAC meeting calendar at your  
25 places. They are tentatively firm, unless of course we

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1 that's necessary to implement a comprehensive watershed  
2 management program. We intend that draft to be kind of a  
3 target document for a while so that we can kind of work  
4 through the different groups and interest to try to refine  
5 the process that is necessary to implement a comprehensive  
6 effective Watership Management Program.

7 Additionally, it was our intent, and we will  
8 discuss this a little more later in the program related to  
9 broader topics, that this is one of the areas of interest  
10 that we would want to establish a science peer review team  
11 as we did with the Ecosystem Program to bring in  
12 specialists and scientists and stakeholder groups to work  
13 on this between draft and final to come up with a  
14 comprehensive program that is supported by a broad  
15 cross-section of stakeholders to implement a Watership  
16 Management Program.

17 So that is the intent of this piece. It's  
18 something that has been talked about a lot and in a lot of  
19 different quarters, and with that we can kind of have a  
20 target piece to begin more detailed discussions over.

21 MR. MADIGAN: Sunne.

22 MS. McPEAK: Mr. Chairman, not knowing how  
23 ahead of the curve Lester would be and commission would be  
24 here today, I've had discussion raised by Supervisor John  
25 Upton who is from El Dorado County and is President of the

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1 hear from you in some large numbers that indicate  
2 problems, in which case we will probably change the March  
3 meeting that is going to be held in Burbank, the Burbank  
4 Hilton. It's going to be a two-day meeting. It will take  
5 place just after the release of the EIR. That meeting is  
6 being co-hosted by the Southern California Water Committee  
7 and will include some panel discussions on CALFED by  
8 representatives of the Southern California business  
9 community. Okay. Much to do today, Tom.

10 MR. GRAFF: Are we going to hear from the  
11 State of California today on the delays in the Water  
12 Rights Hearings that were promised to be concluded by the  
13 end of this year by Governor Wilson?

14 MR. MADIGAN: We will get back to you on that  
15 one as some of those conversations are taking place as we  
16 speak.

17 All right. Lester, do you want to take a  
18 moment and go through the Watershed Management strategy  
19 letter that you sent out, and let's go ahead and take that  
20 under Chair's report and engage in whatever conversation  
21 this group wishes to have on that matter.

22 MR. SNOW: Yes. I think I would just make a  
23 few brief comments. We have kind of a draft concept paper  
24 on Watershed Management with particular emphasis to upper  
25 watershed in terms of kind of the process and coordination

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1 California Community State Association and Watership  
2 Management, and Bob you probably have also had a lot of  
3 that discussion and as a way of seeing what can be done.

4 I had a conversation with Roberta who is  
5 Chair of the Ecosystem Restoration Program asking that  
6 this issue be discussed there, and so I would like to ask  
7 that not only does the Watership Management paper go for  
8 review to the Ecosystem Restoration Committee, but if we  
9 can have staff specifically ask John to join you and RCR  
10 folks in the dialog with the committee I would appreciate  
11 it. Is that okay with you?

12 MR. MEACHER: Yes, that's fine.

13 MR. SNOW: Yes, that would be great, and  
14 groups that we specifically talked to could really focus  
15 on this that would not normally be on the ecosystem work  
16 group but Sierra Nevada Alliance and RCRC that both have  
17 very specific interests on how we approach Watershed  
18 Management, particularly in the upper watershed. So on  
19 this issue, the more the merrier. In fact, what we have  
20 discovered is that a lot of obstacles to effectively  
21 coordinate Watershed Management is that there is a lot of  
22 players out there and it's hard to get them coordinated  
23 and even run into times and turf issues. Imagine that in  
24 the water business. So I think the extent to which we can  
25 get that kind of dialogue going, the better off we are.

8

1 Alex.

2 MR. HILDEBRAND: I would like to offer three  
3 brief comments on the Watershed Management strategy that  
4 was passed out. First, it doesn't mention when it talks  
5 about stressors the stress in exotic species which is a  
6 major consideration.

7 Secondly, I think we all agree that any given  
8 level of human and exotic species population, we should do  
9 the best by the environment that we can and we can do  
10 better than we have; however, it doesn't seem to address  
11 the question of the degree to which the actions are  
12 proposed or actually feasible and equitable with other  
13 needs, and as we have discussed before, we don't want to  
14 throw a lot of resources in something that's not  
15 achievable. That obviously is a judgment call, but it  
16 doesn't seem even really making that judgment.

17 Thirdly, as we have discussed sometime ago,  
18 there are some substantial opportunities for more multiple  
19 use and reuse of the limited water supply, and that  
20 doesn't really get addressed in here or elsewhere in the  
21 program that's now set up.

22 MR. IZMIRIAN: I would like some  
23 clarification on the exotic species. Are you talking  
24 about cotton, alfalfa, cows, chickens or what?

25 MR. HILDEBRAND: All of the aquatic species

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1 and have it out on the street basically in mid-March, a  
2 public draft of the EIR/EIS and go through a public  
3 comment period which right now looks like we will be  
4 initially sent out as a seventy-five day comment period  
5 which would take us to early June for when we would be  
6 closing comment.

7 It's our intent to have upon release, shortly  
8 after release, a major public orientation session in the  
9 form of public meetings to walk people through what's in  
10 the document, what's not in the document, to be able to  
11 discuss that, have public workshops right before the end  
12 of the comment period, then work through a finalization  
13 response to public comment and that type of thing so  
14 that's kind of the general schedule that we're looking at.

15  
16 Again trying to target at the end of this  
17 year for certification of EIR and Record of Decision on  
18 the EIS.

19 There is an awful lot of material that has  
20 been accumulated over the last two and a half years so we  
21 have in the EIR/EIS kind of a classic main document of  
22 hundreds and hundreds of pages and even more technical  
23 appendices. I'm not familiar with the number of technical  
24 appendices, twenty something; is that correct, Rick? Each  
25 of them significant documents in and of themselves.

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1 effecting the whole food chain in acting as weeds in the  
2 system.

3 MR. BUCK: I think he's aimed at Striped Bass  
4 here, Richard.

5 MR. MADIGAN: Other questions? Okay. Lester  
6 has stepped out for a moment to take a phone call.

7 The next item on the agenda is the status of  
8 the EIR/EIS, and here he comes now. Are you moving over  
9 to another microphone to use the overhead projector? All  
10 right. Item two, status of EIR/EIS. Lester.

11 MR. SNOW: Thank you. Let me just mention, I  
12 don't want to appear rude going out but we're trying to  
13 get the latest information on the water rights schedule as  
14 Tom requested a moment ago so that we're giving you the  
15 latest information about what the plan is and what the  
16 strategy is. We hope to get some better insight this  
17 morning.

18 What I want to do take just a few minutes and  
19 give you kind of a status of where we are on the EIR/EIS,  
20 the draft and getting it out on the street and some of the  
21 issues about how we are trying to structure and frame  
22 discussions and debate. Generally where we are is a plan  
23 to have a public draft. We expect after discussions this  
24 week to have a completed draft for CALFED Policy Group  
25 consideration in late February and be able to go to print

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1 One of the things that we have introduced is  
2 something is that we are just generically calling the  
3 Phase Two report which is kind of our key document for  
4 explaining how all of this stuff fits together. In our  
5 program is a lot of moving parts, and those of you  
6 familiar with EIR/EIS's know that sometimes it can be  
7 rather doubting to deal with that and sometimes prohibits  
8 the public from really getting an understanding of what is  
9 going on in the report, so we are producing a document,  
10 Phase Two report that ends up being an appendices to this;  
11 but this is the place that really pulls the issues  
12 together and tries to explain them in a fairly concise  
13 fashion.

14 What we wanted to try to do in that document  
15 is focus on the steps we have completed to get where we  
16 are, identify the issues that we know something about, the  
17 issues we don't know something about, and talk about the  
18 steps to lead to a preferred alternative.

19 What happened at the policy group meeting  
20 after you met in December was basically a decision to not  
21 have a classic preferred alternative identified in this  
22 draft report that comes out. A general sense of what we  
23 need to accomplish in the report, we are referring to it  
24 here in terms of the contents of the Phase Two report, is  
25 do a better job of describing the common programs, how

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1 they work, how they perform, there contribution to the  
2 overall improvements in the system, move into a  
3 description of all twelve alternatives and then step down  
4 into the three hybrids that we discussed with you at the  
5 December 12th meeting, paying particular attention to the  
6 strengths and weaknesses, how they work, what their  
7 strengths are, what their weaknesses are issues of  
8 concern, and then move into a discussion of you know, the  
9 alternative that has resource advantages as we discussed  
10 the last time. Where a dual system provides certain  
11 advantages but also has significant issues of concern. So  
12 talk about the technical issues but then raise the broader  
13 issues of why might you want to reconsider the technical  
14 advantage. Then move onto a discussion of how we are  
15 going to try to resolve these issues and come up with a  
16 decision for the final.

17 Okay. Let me just mention this very quickly.  
18 We will get to this in more detail, we don't want to spend  
19 a lot of time on it right now. We actually included in  
20 your packet and later this morning we will make reference  
21 to this, an annotated outline of the Phase Two report has  
22 seven basic sections to it from Program Overview to  
23 Implementation Strategy and a lot in the middle about the  
24 alternatives and there performance and you know basic  
25 steps to get to the end of this.

13

1 those standards, and shortly thereafter the Bay Delta  
2 counsel collapsed for obvious reasons. Then it took --

3 MR. MADIGAN: I remember.

4 MR. GRAFF: Then it took a while for kind of  
5 Humpty Dumpty broken eggs to be put back together again  
6 but they were indeed somehow patched up, and then in '94  
7 we launched a new process. We had a great celebrated Bay  
8 Delta accord, and in that accord was promised within three  
9 years a decision, final decision from the Bay Water  
10 Resources Control Board issuing new standard of something  
11 the 1998 standard and application of those standard to the  
12 water using community. It was then after some struggle  
13 and delay a year and now in this letter from Mr. Pettit,  
14 we hear that the decision is likely. I'm not even going  
15 to say "likely." It might happen in the June to August  
16 '99 time frame.

17 I guess my question to you is based on all  
18 that do you see any impact from this remarkable change in  
19 the State Water Resources Control Board projected decision  
20 on CALFED and on the schedule for the EIS/EIR

21 MR. SNOW: There is a couple of different  
22 kinds of answers to that question, let me give you maybe  
23 the most straight forward. There is nothing in the water  
24 rights proceedings that has a substantive effect on how we  
25 approach ecosystem restoration, levy stability, water

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1 So I guess at this point I would like to  
2 answer any questions there might be about the schedule and  
3 basic approach, recognizing we will get into the Phase Two  
4 report in more detail later on the agenda.

5 MR. MADIGAN: Questions? Tom.

6 MR. GRAFF: As you know, there's a letter  
7 dated January 23rd from Walt Pettit, Executive Director of  
8 the Resource Parole Board to Roger Peterson and Dave  
9 Kennedy, and it deals with the timing of the Water Rights  
10 Hearing process.

11 A little bit of history. In Governor's Water  
12 Policy enunciated in April of 1992, he promised a Water  
13 Resource Control Board decision by the end of that year,  
14 and shortly thereafter based on that promise they dealt an  
15 oversight. Counsel was born and a number of  
16 environmentalists went on that counsel based on the  
17 premise that a water right hearing decision would be  
18 coming up, Water Resources Control Board decision would be  
19 coming up which of course had been promised previously by  
20 the prior governor and no change had been made, and  
21 decision 14835 since 1978 where it was a broad consensus,  
22 I believe, and certainly among the environmental community  
23 that changes in those standards were required.

24 Then on April Fools Day 1993 the Governor  
25 ordered his Water Board to cease and desist from issuing

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1 quality improvement, how we look at water moving in and  
2 around the system. So it does not change substantively  
3 any of the work that is going on.

4 What has been brought up by various  
5 stakeholders is that stakeholders may make it an issue  
6 connected to the process, but the point that I'm making is  
7 that allocation of water rights doesn't create habitat.  
8 You still have to do the work necessary for that. Water  
9 rights allocations don't stabilize levies. It doesn't  
10 remove Mercury from water supply. It doesn't change the  
11 diversion effects of the pumps. All of those issues are  
12 still there, so we still have all of our work to do  
13 regardless of the timing of the allocation  
14 responsibilities of true water rights.

15 I understand in the political arena there is  
16 different issues to be dealt with but we continue working  
17 and analyzing and coming up with conclusions on all of  
18 those other issues not effected by water rights.

19 MS. McPEAK: Tom, I am reminded by your  
20 eloquent recitation of the history that D-1485, 1978  
21 resulted in a number of people suing and Contra Costa  
22 County was a Plaintiff in that and that ended up  
23 ultimately with the Rackinelly, [ph.] decision that  
24 asserted, I'm going to not be I am sure technically  
25 accurate or legally on target but what I really took away

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1 from Rackinelly was the notion that there was a  
2 commitment, an obligation by the State to public trust and  
3 to the health estuary that couldn't be obligated by  
4 contracts of Water Rights but that had to be dealt with in  
5 the balance; and in the last forty-eight hours or so when  
6 I have been in meetings with various people around this  
7 room, apparently it's gone over my head the significance  
8 of the delay with the State Water Resources Control Board  
9 Hearing on water rights because I thought that seemed  
10 inappropriate because we were doing the far more  
11 fundamental work here in CalFed about restoration of the  
12 estuary to give them a foundation on which to act.

13 So since I have been in meetings and not  
14 understood the significance of all of this, my question is  
15 what am I missing and why would we -- why would that have  
16 implications here?

17 MR. GRAFF: Well, one way to view D-1485,  
18 those of us who are hold enough at the remember it --

19 MS. McPEAK: I'm old enough to remember it.  
20 I apparently don't understand the significance.

21 MR. GRAFF: The then Water Board essentially  
22 said here are a set of Bay Delta standard that are interim  
23 while we, the remainder of the then administration, build  
24 the Peripheral Canal, and there were some of us who  
25 thought that was foolish for many reasons, one of them

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1 obligations, maybe they should be more broadly shared.  
2 That is the point of deciding this process, but now we  
3 have more delay.

4 MS. McPEAK: So it's the water quality  
5 standards not -- more permanent set of water quality  
6 standards, not the water rights proceedings that would  
7 follow from them that you're --

8 MR. GRAFF: I mean one of the more cynical  
9 interpretations here is that the water users are setting  
10 up the same play that they tried in '78 . Let's have  
11 inadequate standards inadequately applied while we build  
12 things.

13 MR. BUCK: I think it should be pointed out we have  
14 the standards in place that the Water Board adopted in  
15 '95/'96. The standards are there. The standards are  
16 being met. What a lot of stakeholders are requesting is  
17 that there are a lot of negotiations going on right now to  
18 provide a settlement so you wouldn't even need to go to a  
19 Water Rights hearing, that the water would be divided up  
20 in a different way through negotiated agreements.

21 The intent is to allow that process to work,  
22 provide some room for those negotiations to essentially  
23 redo the hearing schedule to have workshops so these  
24 agencies can bring forward what they are doing rather than  
25 jump right into an adversarial process that is all just

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1 being that the proposed canal as then contemplated was a  
2 mistake, but also because one needed to protect the  
3 estuary in reality, and in the meantime however long it  
4 took to pursue that plan, and almost by concession the  
5 Water Board at the time was saying we -- we can't protect  
6 the estuary, at least we are not intending to and when  
7 we -- when we project perhaps protecting it is along the  
8 line sometime when facilities are built, and of course it  
9 wasn't just the Peripheral Canal, it was the Peripheral  
10 Canal and billions of dollars of storage.

11 I mean there is a certain echo here the EPA  
12 almost within a year or two thereafter said these  
13 standards are inadequate and they point blank said that  
14 but deferred acting on their opinion for over a decade  
15 while Federal and State Governments struggled and  
16 stakeholders and the like struggled and finally we put it  
17 all back together and said, okay, you know, we signed up  
18 for the Bay Delta accord, we serve on this counsel and  
19 other commitments to a consensus-based process on the  
20 theory that we are going to finally have a standard  
21 adopted that are adequate to protect the Delta that don't  
22 depend on future facilities that are protected now and  
23 that then are applied to the water rights holders of the  
24 watershed in some fashion. Maybe only the State and  
25 Federal projects should be -- should have those

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1 about allocating the water for the standards that exist or  
2 are right now. So what we are trying to do is create a  
3 situation where we don't have the confrontation in a  
4 realistic water rights process that takes everybody away  
5 from the main game which is CALFED.

6 MR. DUNNING: Yes, Byron is right. We have  
7 the quality standards but we don't have the approachment  
8 of responsibility. Without that approachment of  
9 responsibilities, Lester, aren't we not knowing what the  
10 baseline is with which CALFED has to work? Doesn't -- in  
11 other words, doesn't the way that responsibility is  
12 apportioned between the projects and the non-project  
13 diverters have a lot to do with flows on the tributaries  
14 and other matters of fundamental concern to CALFED.

15 MR. MADIGAN: Stu, you have a question? I'm  
16 sorry. Let me -- wait. Hold on a minute. We need to  
17 answer a question.

18 MR. SNOW: I guess my general response to  
19 that question is that the water rights proceeding is not  
20 going to dramatically affect the basic water management  
21 strategy that we are looking at. It does not dramatically  
22 affect the basic problems that we have in the system. I  
23 mean it makes some some differences, in certain location  
24 that is can be adjusted to. But it's the water rights  
25 proceeding doesn't all of a sudden move half a million

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1 acre feet off the Sacramento river on to the San Joaquin,  
2 you still have the basic hydrological regime that you have  
3 to work with the same basic fish problems entrainment,  
4 fish passage problems. There are some subtleties to it,  
5 but it does not have the dramatic effect on the basis that  
6 you take to approach these problems.

7 MR. MADIGAN: Go ahead.

8 MS. McPEAK: My question, Lester, is -- and  
9 maybe Byron wants to comment, too, and Hap -- the water  
10 quality standard exist, the question that I have is, a,  
11 are they sufficient; and if that were going to end up in  
12 CALFED and, as I think you just elaborated, are there not  
13 additional performance indicators and strategies about the  
14 health of the estuary that would have impact on water  
15 rights, i.e., apportionment of responsibilities for  
16 meeting those additional performance standards and  
17 indicators that we will come up with on estuary help.

18 I guess I come at it that, A, I am not sure  
19 that the water quality standards that exist are the right  
20 ones; B, I don't think that there is a sufficient action  
21 or indicators that what needs to be done for the estuary  
22 health and that it would be a fuller commitment that would  
23 drive water rights for a portion of responsibility. So I  
24 am asking all three of you what again --

25 MR. SNOW: Let me make a quick comment on

21

1 the so-called "Waldo Process" is that the Lead Technical  
2 Consultant for that process has suggested significant  
3 weakening of the standards that are now in place as Water  
4 Quality Standards and that is Water Rights Standards as  
5 part of a Peripheral Canal package as proposed by them,  
6 and I guess you have often said, Lester, that that is not  
7 your intention, but that seems to be the Ag Urban  
8 intention, and that is of significant concern.

9 MR. MADIGAN: Byron.

10 MR. BUCK: To rest right away, we have  
11 discussed B-2 and the scientific basis behind it and a  
12 process through the ecosystem restoration program to  
13 continue to assess its efficacy and whether it needs to be  
14 out toward the bay or whether it can come the other way  
15 based on how the habitat and species are responding.  
16 There is no attempt, no proposal of agreement to do  
17 anything with that standard now other than to subject it  
18 to scientific review in the future through an open-period  
19 process.

20 I would add on to Lester's comment the CALFED  
21 program, yes, is indeed looking for more flows above and  
22 beyond the standard, but those are going to be proposed  
23 through market mechanisms. They don't need to be enforced  
24 or brought about through a water rights regulatory  
25 process, so we don't need a State Board process to do what

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1 that. The water quality standards are there. We have  
2 assumed them in all of our alternatives, the Accord  
3 Standard, we have assumed implementation of CBPIA  
4 particularly related to flows, as difficult as that is to  
5 model, and then -- but even with that, we have assumed  
6 actions beyond that in order to achieve the level of  
7 recovery of health of the ecosystem that we have targeted.

8 So while one certainly could argue that the  
9 water quality standard are adequate and provide sufficient  
10 flows in our program, we have found areas where we think  
11 flows need to be supplemented and have a program designed  
12 to do that which actually we intends to discuss later this  
13 morning to illustrate the concepts so -- and I don't think  
14 that so much an indication that we have. We viewed the  
15 standards not to be adequate. The standards are a  
16 regulatory framework, and what we have promoted is that  
17 within that framework we think there are places where  
18 there is additional flows that are necessary to achieve  
19 the level of ecosystem performance that we have target.

20 MR. GRAFF: Oh, I'm sorry.

21 MR. MADIGAN: I'm trying to get an answer to  
22 Sunne's question because she asked, but I have you, Stu.  
23 I haven't forgotten.

24 MR. GRAFF: Just to follow-up on that point,  
25 maybe Byron going next is a good thing. What we hear from

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1 we want to do in CALFED. That can be done through other  
2 mechanisms.

3 MR. MADIGAN: Stu.

4 MR. PYLE: Mine is a comment on the process  
5 we are engaged in right here, Mr. Graff has very  
6 effectively changed the agenda he put a new item on the  
7 agenda for discussion which was not on the agenda  
8 something that he has done on many occasions and I think  
9 that it is not the best use of the time of this body to  
10 bring everybody here together for the long agenda and many  
11 things we discussed and then to take off on something that  
12 is not really subject to be discussed.

13 I think it would be of value to everybody  
14 here if representing the state board were here to discuss  
15 what their process is and the water rights hearings, that  
16 is of interest, there is an effect and I think that people  
17 are aware of it no that their changes in the state water  
18 rights boards's process and schedule of activities because  
19 of the CALFED program, because of the settlement  
20 negotiations that Byron and Buck mentioned and a number of  
21 other things but still I don't think that this is the  
22 agenda that we are on at this point, and I think that it  
23 is a waste of all of our time to or let me just not a  
24 waste but an infective use of this body to spend some time  
25 on this at this time.

24

1 MR. MADIGAN: No, this is -- this is a  
2 prerogative of the chair and I accept the criticism, I  
3 mean it's not Tom's decision to do that it's mine, to do  
4 that, and I do that as I have said before around here  
5 because I think we are a lot better off with the concerns  
6 being explicit, things happen in this business with great  
7 regularity and I don't wanted anything to be -- I don't  
8 wanted anything to be tucked away and buried where it  
9 festers.

10 If we have got a problem, I think we need to  
11 get it out in the open, whether it's what Walt and the  
12 State Board might have said in the last few days or  
13 whether it's the letter that Lester wrote or whatever. I  
14 do want to keep us on the agenda, not the full agenda but  
15 I would rather that if there is something that is really  
16 eating at people, that we get it out than not get it out.  
17 I mean that is what I have historically tried to do,  
18 anyway. I have got half and then I do want, okay, Mike,  
19 and then I want to go to the audience, and I know Gary  
20 wishes to be heard as well. Hap.

21 MR. DUNNING: I just wanted to disagree with  
22 what's been said about the substance the presentation was  
23 on the time line with the CALFED work and were talking  
24 about external events which have a direct bearing on how  
25 effectively that work can be done within the time line so

25

1 then.

2 MR. BOBKER: Yeah, very recent. The ink is  
3 smearing on my hand, but so that that should save some  
4 time, and you can look at that and maybe get a better  
5 understanding.

6 I just want to very briefly explain why Tom  
7 and others brought this up, what the relevance is to you  
8 all here and CALFED process. One is that CALFED doesn't  
9 work if we didn't have interim implementation of the Bay  
10 Delta a- toward '95 plan. It's a question right now, the  
11 potential extension of the time line for the state boards  
12 water rights hearings leaves unresolved the issue of who  
13 will comply with water quality standard reviewed to the  
14 accord December 31, 1998. There is no agreement on that  
15 as of today that needs to be resolved.

16 We could have a situation where beyond the  
17 end of this year until the water rights proceeding is  
18 completed there is controversy over who meets standard  
19 that is an important issue. If that is not resolved,  
20 obviously we run into a major roadblock.

21 Secondly, there is an assurance issue.  
22 CALFED was the third tier of a process set up way the  
23 framework agreement between the stated and federal  
24 government in June every 1994. Water quality standard  
25 were agreed to, where the schedule was agreed to water

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1 I don't think the agenda was changed at all.

2 MR. PYLE: My understanding is that the State  
3 Board has taken recognition of the CALFED process and  
4 other events that are taking place, the negotiations that  
5 I mentioned and is adjusting their schedule to best serve  
6 the State and their response to all of these other items  
7 that are taking place. So it seems to me that the best  
8 thing that this body can do is move ahead towards the  
9 objective of getting the reports out on the EIR/BIS on the  
10 street.

11 MR. MADIGAN: Mike, right here.

12 MR. STEARNS: Mr. Chairman, I just wanted to  
13 comment that some of us I think have a different view  
14 pointed of what the change in schedule water rights  
15 hearings entail and if it's something that the Chair feels  
16 needs to be brought before this group, I think it would be  
17 helpful if we did have the Water Rights folks here to give  
18 us a more complete answer to these things because without  
19 that, I don't see how we can resolve this today.

20 MR. MADIGAN: Thank you for that. Gary.

21 MR. BOBKER: I'll try to make this brief  
22 being sensitive to the full agenda that you have a number  
23 of environmental organizations. In the letter dated today  
24 which explains --

25 MR. MADIGAN: It would be a recent letter,

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1 quality standard initiating water rights decision to make  
2 sure that responsibility was allocated equitably and then  
3 go onto the long term solution. That second tier was  
4 supposed to be completed in June of 1997.

5 Now, so there is a question about do we have  
6 the assurance really that the way the program was  
7 envisioned happen will happen. I also wanted to say that  
8 another assurance issue here is that it's -- there is a  
9 lot of talk informed and misinformed about new water  
10 quality standards, and I don't think it's productive for  
11 any of us to get into a situation where we talk about  
12 revising new water quality standards when way don't  
13 implement the ones that we have now fully and equitably.  
14 That is not -- that is not an effort that I wanted to put  
15 my resources into.

16 And thirdly, the baseline issue, obviously  
17 the water rights proceeding, the final decision whatever  
18 form it takes will effect water supplies of specific  
19 districts and water users in the Central Valley, and  
20 overall that may or may not have a major impact on water  
21 management but it certainly will have a major impact on  
22 particular users, and I think that they need to know what  
23 the baseline they are working from is when they look at  
24 how the CALFED long-term solution will effect them.

25 Similarly there are issues about

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1 environmental protection that are embedded into Water  
2 Rights decision that again form sort of a baseline for  
3 what CALFED should do beyond that. So there is a whole  
4 number of issues related that we really do need to see  
5 where the Water Rights proceeding will take us before I  
6 think we can finalize CALFED and that is the reason --  
7 those are the reasons that I think it's relevant that this  
8 simply isn't, oh, there is a dissatisfaction, let's bring  
9 it up at CALFED. There is a linkage, a very logical  
10 linkage, and I hope that people will take a look at the  
11 letter, and if you have questions about our concerns about  
12 that, please, you know, talk to the signatories about  
13 that. Thanks Mike.

14 MR. MADIGAN: Thank you, Gary. The good news  
15 is that I have been advised by our attorney that I'm not  
16 going to jail for allowing this conversation.

17 The bad news is that as we have a new court  
18 reporter today and I'm not doing a good enough job of  
19 identifying you specifically. So I'm going to try to  
20 identified you more specifically as we go, but if I don't  
21 say "Tom Graff" or "Mike Stearns" or something like that  
22 and that will help her out.

23 Finally for those of you who have materials  
24 to be distributed, if you would indicate when you come up  
25 that or if you are here, that copies are available or

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1 other than our usually meetings and town halls? We have a  
2 lot of work to do in that area.

3 MR. SNOW: No. We have prepared what's  
4 called a rollout of information strategy to try to work  
5 through the very point you're raising and also to make it  
6 easier for BDAC members and stakeholders to initiate some  
7 of those things to, you know, work more effectively with  
8 the people that we are working with, and Mary is in the  
9 process of trying to work on strategies specifically for  
10 BDAC to be involved in those kinds of activities and  
11 modify the normal approaches.

12 I mean we are planning many meetings between  
13 now and say the close of the comment period but I think  
14 it's also important that those of you from particular  
15 areas to help us identify we call them leverage points or  
16 areas where we really need to get the word out of existing  
17 groups that we can go and are already geared up to be  
18 interested in this. So we can share that roll out  
19 strategy and actually work with you to maybe refine a  
20 specific stragaty for the RCRC counties or specific  
21 regions.

22 MR. MADIGAN: Martha Davis.

23 MS. DAVIS: Just to follow-up on that,  
24 Lester, I think there are two components of that strategy.  
25 There is a roll out on the strategy and explaining the

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1 something like that, that would help those who are in the  
2 audience. Okay. Good. All right. Thank you for the --  
3 I am sorry Bob Meach.

4 MR. MEACH: I just want to go all the way  
5 back to Lester's timetable. We said it many times but I  
6 have to ask the question or beg the question, Lester.

7 I represent twenty-seven Northern California  
8 counties and as I have said before and others have said  
9 before, I think that this is a very ambitious time frame  
10 that we're working under, and we all know the reasons why.  
11 We don't need to get into the merits of that but somehow  
12 in here I need to educate and perhaps elicit the support.  
13 Coming to agreement here isn't going to get us to the  
14 final funding in all of this. If I don't have the support  
15 of those twenty-seven northern counties and have the time  
16 to educate them, we are doing this for nothing, in my  
17 opinion. So I -- I need to work with this body or CALFED  
18 in doing some real comprehensive outreach.

19 I talk to you jokingly. I have said to the  
20 Chair before about sequestering this body until we can  
21 figure it out, but we also have to go out and do the  
22 outreach with our constituents, and I don't see that being  
23 feasible here.

24 Do you have any ideas? Lester, has there  
25 been any discussion on how we get this out to the public

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1 alternatives and the assumption of the alternatives and  
2 the analysis, but there is also the backend of the process  
3 which I think is going to be time consuming which is how  
4 do you take the feedback, re-integrate it and then the  
5 process of rolling out that last line with the proposed  
6 alternative.

7 I mean there is -- there is a -- it's not  
8 just there is an ambitious schedule on the up-front part  
9 because we have all been talking about the need for  
10 additional information and how do we integrate that into  
11 the draft report that goes out in March.

12 It's after you do the public review and your  
13 getting the feedback there is going to be new ideas on the  
14 table, there is going to be new approaches that need to be  
15 discussed, and as we work with our communities, that part  
16 of the processes is where our most concern about how do we  
17 design a communication strategy that allows us to really  
18 build the agreements that we need in order to be able to  
19 deliver on the end product. We look at that time line and  
20 it worries me enormously, and I don't think that it's  
21 realistic.

22 MR. MADIGAN: Okay. Thank you.

23 MR. RAAB: I read a newspaper article a few  
24 weeks back that included you as saying that there were  
25 only so many people in California that understood this

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1 water problem.

2 MR. MADIGAN: And he is counting you.

3 MR. RAAB: That's my question. I don't  
4 believe that personally. That is my question. Some of us  
5 would really like to know who is on the list, and then we  
6 would know and then we know who to pay attention to and  
7 who not to pay attention to.

8 MR. PYLE: That's going down every year.

9 MR. MADIGAN: Ann Notthoff.

10 MS. NOTTHOFF: I was going to say that I  
11 think that it's a hopeful sign that this Phase Two report  
12 seems to be CALFED's attempt to demystify the huge  
13 documentation that is going to accompany the release of  
14 the EIR/EIS, and I wanted to just put a plug in for making  
15 it as comprehensible, you know, making the linkages and  
16 explaining it, and if that is in fact the intent behind  
17 that, which I hope it is, that is going to be really key  
18 to help maybe boost the number up to two hundred. Who  
19 knows, I mean but that -- I think that that is really  
20 going to be an important part of this document release and  
21 to put a lot of time and effort into making that  
22 comprehensible.

23 MR. MADIGAN: Okay. Good. Thank you all  
24 very much, gentlemen.

25 Roger

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1 millions of dollars with different owners, different  
2 licenses, different operating requirements, different  
3 price structures and different market interfaces, et  
4 cetera.

5 We would like to come back then at the March  
6 meeting and at least show you the numbers so that we are  
7 all -- a range of numbers on how this might affect the  
8 industry, the impact of the parties in all of these  
9 facilities and let you decide whether you think those are  
10 insignificant numbers on not ought to be set aside, and  
11 I'll be happy to discuss it with you and if they are, then  
12 we should set them aside. But I have a feeling that they  
13 could be large and they could be issues that could be  
14 dealt with more comprehensibly if they were kept on the  
15 time, so to speak, as part of your investigation and  
16 deliberations as opposed to just assume it to be fairly  
17 minor in nature.

18 MR. MADIGAN: Lester.

19 MR. SNOW: Yeah. I think that the overall  
20 power issues have been brought up that we need to re-look  
21 at that. Recently as you may know, on the club fed side  
22 of CALFED, the Western Power Administration has been added  
23 as an entity. They have raised the issue perhaps a little  
24 differently than you have in terms of what I would call  
25 the market limitation to endure additional costs and

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1 MR. FONTES: Thank you. Before we leave the  
2 subject of EIR/EIS, may I speak a little bit about the  
3 issues that are affecting hydro-electric power in there?

4 MR. MADIGAN: You may.

5 MR. FONTES: Many of you may wonder why I  
6 have been here and our agency has been participating. We  
7 represent headwater owners of California, and quite  
8 frankly we are a little concerned about the impact  
9 assessment that the EIS is envisioning in treating power  
10 on minor impact. Not so much that we think it's minor or  
11 major, it's that the assumption that we feel that  
12 restructuring parts of our industry will be the way that  
13 the problems and impact the assessments get solved and the  
14 allocated to participants. I think, Lester, you know that  
15 our staff does not agree with that assumption and for  
16 various reasons.

17 What I would like to do is to have -- I don't  
18 know how much or how far you want to go into the reasons.  
19 I think that you need to look at this in a little bit more  
20 detail but I would like to offer to the counsel would  
21 agree to ask the staff to work with us to look at  
22 potential impacts on California's hydro-electric operation  
23 inside the Northern Valley. They are substantial,  
24 literally tens of billions of dollars of investment there.  
25 There is higher production that is in the hundreds of

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1 because of the free market then there is the ability to  
2 raise revenues from a certain power facilities and they  
3 raise that issue and we need to make sure that we have  
4 integrated that in some fashion. It sounds like you're  
5 raising a slightly different issue but probably including  
6 that issue so I think that we can make sure we have  
7 captured the issue and maybe some discussion with you with  
8 WAPA and CALFED and make sure that we have got it  
9 characterized properly.

10 MR. FONTES: Sounds fine.

11 MR. SNOW: Okay.

12 MR. MADIGAN: Okay, then. We will move onto  
13 the CALFED Water Management Strategy. You're on. We are  
14 track you down for a moment. Go ahead, Lester.

15 MR. SNOW: Okay. Now for something very  
16 mundane, the essence of our Water Management Strategy in  
17 the CALFED program. Maybe not as exciting or immediate as  
18 the issues that we have just discussed but this is  
19 something that has been an implication of everything that  
20 we're doing, kind of an implicit approach of what you do  
21 when moving forward on solving problems in the system. So  
22 I want to take a little bit of time to walk through how we  
23 have approached this.

24 You are going to, you know, see some concepts  
25 that we have been talking about for two-and-a-half years

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1 probably since our first, first or second meeting and then  
2 also try to make it very real, have or ask Dick to develop  
3 a very real example of how you might manage the water  
4 system to produce additional fishery benefits at the same  
5 time that you're allowing for water supply reliability.

6 Let me kind of start into this. You know,  
7 this is what you know probably overdone from your  
8 perspective that we use this so much, but this is the  
9 essence of what we are trying to do, beginning to try to  
10 finds solutions that represent a way for everybody to see  
11 improvement in the resource issue of most concern to them,  
12 and what we have talked about is -- you know, some of the  
13 conflict was in the past is we have got an ecosystem  
14 problem that has got an endangered species. That species  
15 can be taken by a pump, so shut that pump down. That  
16 results in a diminishment of water supply reliability.

17 By the same token, in the past we may have  
18 seen somebody define a water supply problem, they want to  
19 fix the water supply problem so they build a reservoir,  
20 and this really should be increased diversions, and they  
21 increase diversions into it and they end up with more  
22 conflicts of fisheries.

23 What we try to do throughout the CALFED  
24 program is what we would call in a broader sense resource  
25 management in terms of trying to find combination of

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1 this is total Delta outflow, and you can see it ranges,  
2 you know, roughly from 60 million acre feet of outflow in  
3 a given year to probably somewhere less than 4. You know  
4 incredible annual variability in the system. So again,  
5 you can kind of see if somebody is talking about an  
6 average in here and you're arguing about that average, it  
7 really is just masking the essence of the problem in the  
8 system.

9 To kind of further illustrate it, you drop  
10 down to monthly and you can see a high of 15.6 million  
11 acre feet of outflow in the month of March 1983, you see a  
12 low of 180 thousand acre feet in September, this occurred  
13 in quite a number of years and then an average of 1.2, and  
14 so this is the kind of contrast that I think is important  
15 to keep in mind as we try to move forward and try to deal  
16 with the real issues and the real conflicts.

17 The point is in terms of water management you  
18 have a high level of annual seasonal and even in a lot of  
19 cases daily variability. This leads to high variability  
20 in terms of impact and water value. Obviously you can see  
21 in those low-flow years you could end up with a lot  
22 greater impact of your diversion than in other situations  
23 and also the relative value of water varies from year to  
24 year.

25 Now, this is a popular one. This is the one

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1 actions that address the issues without having them to be  
2 a win/loss type of situation, and in the broad context of  
3 water management -- or I mean resource management it's not  
4 just water. So this would be an example of resource  
5 management where to deal with problems you're doing a lot  
6 of non-flow types of thing restoring habitat, putting fish  
7 screens on reducing toxic contaminants in the system, and  
8 then you're combining that with additional water from your  
9 water management strategy that then actually improves the  
10 performance of these non-flow measures to make sure that  
11 you have the water over there in the right times, the  
12 right amounts to enhance the performance out of your  
13 non-flow types of activities.

14 Now, one of the problems that we have in  
15 California water wars is that everybody likes to talk  
16 about averages. I mean that is how -- you know, on  
17 average how much water is diverted from the system on  
18 average, how much do the fish have, and any time you are  
19 talking in averages then you are not talking about the  
20 problems, you are not talking about the problem nor are  
21 you talking about the opportunities, and that is a major  
22 part of how we want to approach this.

23 So to kind of illustrate, this represents the  
24 variabilities. When you hear people talk about the years  
25 of record, this is kind everywhere they start, 1922, so

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1 that I have used many times, so this is accumulation of  
2 that different kinds of information and it shows -- let me  
3 get it up a little further. It shows in general, you  
4 know, pulling -- I mean this is even averages for these  
5 year types, these are the five classification that the  
6 State has, and so the purple on the top is outflow, yellow  
7 is Delta exports, green is in Delta consumption and this  
8 color, whatever it is, red is upstream depletion so it's  
9 water that is either diverted out of the system or  
10 diverted before it even gets to the Delta or before it  
11 even materializes outflow.

12 So this obviously in each of these year types  
13 is a lot of variability, but one of the more significant  
14 things here is that in the wet years you're diverting out  
15 of the system about 24 percent of the water supply;  
16 however, in a critical year it's about 65 percent and I  
17 think even in a dry year 56 percent, and so it's no wonder  
18 that here is where we have our greatest conflict in the  
19 system. More than half of the water that would normally  
20 flow in the system is diverted out of the system. 65  
21 percent a critical year, over here 24 percent. I mean  
22 it's that basic issue that we have talked about in the  
23 past that may give us some opportunity to kind of smooth  
24 things out a little bit.

25 Now, let me switch to the annuals for just a

40

1 little bit. I'm not going to spend a lot of time with  
2 this. That is kinds of a wet year, again, an average wet  
3 year. So kind of taking the sharpness out of it you can  
4 see you have got your highest flow generally in the  
5 wintertime tailing off through the summer.

6 Now, on the same scale, dry years. You can  
7 see the difference. That is a critical, that is even  
8 worse. I didn't have to tell you that, did I?

9 Let me get them all on one. So this is wet  
10 to dry. Incredible variability, and you will see in a  
11 minute when you look at real data kind of the sharpness of  
12 some of the different peaks that are in here, and that is  
13 where I want to have Dick then talk through how you start  
14 matching this stuff up to fish life cycle and try to match  
15 the system to try to produce as much high-value benefit as  
16 possible and move diversions to periods where the impact  
17 are lesser significance.

18 Just to pick up on 1995, that is kind of what  
19 it ends up looking like when you see these initial peaks,  
20 deeper peaks, secondary peaks and then over a period of  
21 time, again Dick will address this, you will see patterns  
22 in all of that.

23 Now, in a general sense to digress just a  
24 moment, the Resource Management concept is to try to  
25 reduce conflicts, reduce the conflicts in the system,

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1 quality. Certainly water quality and reducing water  
2 toxics, water transfers is a method to move water within a  
3 year. So that offers you a lot of water opportunities, a  
4 lot of water sufficiency again as a method to modify  
5 diversion patterns and total diversions and watershed  
6 management, a lot of contributions there but one is  
7 extenuating flood peaks and having a more natural  
8 hydrograph.

9 Now, here is an important point. Usually  
10 people think when we are talking about this water  
11 management strategy that it's just a ruse, a talking horse  
12 for increasing supplies. It can be an opportunity to  
13 increase supplies, but this concept, this issue of looking  
14 at the hydrograph and managing it is valid when you're  
15 increasing supplies, sticking with existing supplies even  
16 if you decrease supplies, this is still an issue that we  
17 have to incorporate into how we manage the system.

18 Okay. The example that we want to use  
19 illustrates how you use storage, how you use storage to  
20 take advantage of the hydrograph and deal with this  
21 time-value concept. I am going to discuss it at a  
22 programatic level. Very simply, in a wet year we try to  
23 go in and find the appropriate point in the system to move  
24 water out when it is actually of lesser value probably in  
25 both the ecosystem and to water users and store that

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1 increase the resistance to impacts, and that is not just  
2 the ecosystem, I mean that's reduce or increase the  
3 resistance of water users, to shortages, increase the  
4 resistance of the ecosystem to assaults whatever they may  
5 be in any given moment and just have more resilience in  
6 the system and to seek multi-objective strategies. Water  
7 management is a critical part of that. There is no way  
8 that you can do it. You can't just do it by building an  
9 ecosystem restore habitat restoration. You have to have  
10 other activities in waters in part of it.

11 So again, the idea is to reduce conflicts,  
12 try to reduce high-value benefits, and the major way of  
13 doing that is try to shift diversion patterns to reflect  
14 the value on the hydrograph. There is a lot of tools to  
15 do that. Each can be used differently.

16 In the Ecosystem Program is a variety of  
17 tools. I mean you can make sure that your putting the  
18 habitat where you can get the most bang for the buck out  
19 of it but also you see there is a way to get water, make  
20 sure that you get water that provides the greatest  
21 benefit. You can use storage to shift diversion patterns,  
22 you can use conveyance to modify how you take water out of  
23 system and where you take water out of the system, levy's  
24 stability, you can integrate habitat into levies.  
25 Actually some of the levy issues you can even modify water

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1 water, and then in this case release that water when it  
2 has much higher value benefit, in this case to the  
3 ecosystem but you can also imagine that that same water  
4 released down the system has a much higher value to water  
5 users in a a year like this during this period than it did  
6 when it occurred; and again, you can kind of think through  
7 or it's showing the storage example because it's the  
8 easiest way to show you can use transfers and other  
9 methods to explain pieces of this.

10 Okay, I think actually Dick is going to start  
11 with this one. Let me do it this way first. Are you  
12 going to use this one, Dick? Okay.

13 What I want to do again is kind of illustrate  
14 a programatic approach kind of how we are thinking about  
15 this in a programatic level, but to make it real we want  
16 to have Dick turn it into an example and illustrate on a  
17 daily basis how you would look at a system on how you  
18 might make some judgments, but kind of for illustration  
19 only at this point acknowledging that we have to do a lot  
20 of work on this to determine what thresholds are, when  
21 should you be diverting from the system, what kinds of  
22 events have to take place, how frequently they have to  
23 take place, when would you release, what is the highest  
24 value period of time. Certainly the subject of a lot of  
25 technical and peer review as we move forward. So with

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1 that let me go ahead and ask Dick to kind of pick up from  
2 here and walk through a specific example.

3 MR. DANIEL: I'm going to start out with a  
4 picture of what occurred in water year 1995 in an effort  
5 to illustrate for you a lot of the concepts that we have  
6 been pursuing, and there is an awful lot of biology and  
7 ecology on this figure.

8 As I go through this discussion please keep  
9 in mind that all of these figures are on the same scale.  
10 They all peak out at 160,000 cubic feet per second. They  
11 are all based on the gauge at Hamilton City on the  
12 Sacramento River.

13 That is significant from an environmental  
14 standpoint in that that is -- that is a gauge that is down  
15 in a levied portion of the river as opposed to a portions  
16 up above Shasta where the Sacramento River continues to  
17 meander and all of the ecological hypothesis that are  
18 associated with that. We put on here again to  
19 re-emphasize that point that Lester was making, the  
20 averages that generally get used in water project planning  
21 and management and the daily peaks as they actually  
22 occurred in 1995.

23 Pietro and others will point out that this is  
24 the parent year for the salmon. Salmon runs the vast  
25 majority of the salmon that we had this last year this

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1 last fishing season if you will. I think when all of the  
2 data comes in and when you take a look at Pietro's  
3 bankbook you will find that the fishermen did very well  
4 this year. This was an extraordinarily high run of  
5 salmon, perhaps one of the highest in record, and what I  
6 did is I have taken a look at this in terms of what was  
7 the preceding conditions that the parent flows for this  
8 year's fish population.

9 I'll start out with Delta smelt. These are  
10 the kinds of flows in January and March, the Delta smelt  
11 used to trigger there spawning migration, these are the  
12 kinds of flows that we like to see for Delta smelt after  
13 they have spawned so that the young go, move down in the  
14 system and utilizes the rearing habitat and entitled  
15 wetlands that exist and those that we hope to construct in  
16 the future.

17 This is the kind of flow in both of these  
18 time periods that sturgeon use to move upstream and spawn  
19 pretty much in the area of Hamilton City. They like rock  
20 to spawn on. Ironically there is a lot of riprap around  
21 Hamilton City, and that is where the sturgeon spawn now.

22 Split tail are a fish that need flooded  
23 vegetation for spawning. They spawn in among the bushes  
24 that are inundated when we have high flows and they spawn  
25 in this time period. These are the kinds of flows all the

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1 way across here that trigger releases into the bypasses,  
2 the Yolo Bypass, the Sutter Bypass and into the Butte Sink  
3 that act nowadays as a surrogate for the floodplains that  
4 used to be very prevalent in our system but which have  
5 been isolated as a result of flood management measures.

6 These are also the kind of flows and the time  
7 of year when seasonal wetlands are associated with those  
8 floodplain. This is the time of year when water fowl are  
9 feeding very heavily and feeding on different types of  
10 food theoretically at least to prepare them for the  
11 migration north and the rigors of that migration. They  
12 also build up a very considerable amount of body fat which  
13 is very essential in there reproductive process. Fat  
14 mama's make lots of babies in this case. These are the  
15 kinds of flows that we like to see for salmon. This is  
16 the time period when fall run chinook are spawning.

17 We didn't have wild fluctuations in flow  
18 during that period. It means that we didn't wash salmon  
19 red out. This is the time period when the juvenile fall  
20 run are moving out of the spawning gravels and spreading  
21 out into the system to rear. This is when we generally  
22 see the majority of the winter run chinook salmon  
23 migrating downstream and migrating into the Delta. This  
24 is when we would see an upstream migration of our spring  
25 run chinook salmon running into the smaller tributaries

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1 and preparing to spawn. These are the kinds of flows that  
2 plant ecologists look for in terms of the ability of  
3 riparian vegetation to germinate and grow prior to the  
4 next year's high-water season so that the next plants can  
5 get themselves established. Few geomorphologists, those  
6 that are worried about the structures of river systems  
7 will tell that you these are the kinds of flows down in  
8 this area that caused the channel-forming processes to  
9 happen in the river systems.

10 There are also the kind of flows that move  
11 gravel around, cleanse the gravel and get it reshaped for  
12 the next spawning year.

13 Ironically, these are the flows that we have  
14 been dependent upon for quite sometime to dilute the toxic  
15 materials that are coming out of Iron Mountain Mine up  
16 near Lake Shasta. These are the kinds of flows that  
17 dilute that material which occurred naturally prior to the  
18 construction of Shasta. I actually have a bunch of notes  
19 here.

20 These are the kinds of flows that set up B-2.  
21 These are the kinds of flows that create that large  
22 expanse of the nutrient trap of the new zone in the lower  
23 end of the Bay Delta System. These are the kinds of flows  
24 that optimize the utility of that for the rearing fish  
25 that move down later on. These are the kinds of flows

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1 that bring nutrients into the system and quite a number of  
2 other things.

3 I heard people talking a little bit earlier  
4 about the existing water quality standards. One of the  
5 things that is very important in those water quality  
6 standards is that they are working right now.

7 The inflow expert ratio, that ratio is there  
8 for a number of reasons and among those reasons is that it  
9 tends to generate enough Delta outflow to where impacts  
10 associated with entrainment or loss of fish to the  
11 inversions is reduced. What we saw in 1995 was that the  
12 inflow to export ratio was like 2 to 3 percent as opposed  
13 to the 45 percent or 55 percent that occurs in this time  
14 frame and the 35 percent that we try to manage to during  
15 that time frame. So all in all we can use an example like  
16 this to look for patterns, patterns of flow in winter,  
17 patterns of flow in March which seem to occur on a very  
18 regular basis, patterns of flow again in late April and  
19 early May.

20 When you look at the life history of the  
21 fishes that we've studied in the Bay Delta System it's  
22 pretty easy to conclude that they evolve to take advantage  
23 of these regularly recurring patterns. They are not  
24 dependent on the spectacular or the disastrous. Frankly  
25 they wouldn't survive. They wouldn't evolve. They

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1 plus or minus something. When you look at averages, you  
2 finds that in this very wet year, only during the month of  
3 March did that occur when you look at the averages.

4 MS. McPEAK: Right. Right. Right.

5 MR. DANIEL: However, if you look at the  
6 daily flows you see that flows at 60 or in excess of 60  
7 occurred many, many times during this particular water  
8 year.

9 What I'm starting to get to in our analysis,  
10 and we have looked at a fair number of years in terms of  
11 dailies is that, and I'll bring this out in an example  
12 that I'm going to go into in a second, is that it's  
13 impossible in a wet year like this with these kinds of  
14 peaks of flow that are usually masked by looking at  
15 averages for a water project to be constructed that would  
16 take this feature out of the hydrograph on the Sacramento  
17 River. There is no way in this instance, for example,  
18 with an offstream storage reservoir or with any reasonable  
19 size of an onstream storage reservoir that you could store  
20 100,000 cubic feet per second and drop this peak to  
21 something down below 60,000. That just is reality.

22 So on my discussions with our modelers,  
23 basically we have concluded that nature on the Sacramento  
24 River is going to generate enough flow to do this and  
25 there isn't enough concrete to stop it.

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1 wouldn't adapt to the system if they had to rely on the  
2 unusual. It's these regularly-recurring patterns that we  
3 are focusing on in terms of looking at restoring the  
4 ecosystem health.

5 Now, with that --

6 MS. McPEAK: Before you move on, I think the  
7 60,000 CFS is actually -- could you point that out for  
8 everybody.

9 MR. DANIEL: Here's 60 right there.

10 MS. McPEAK: Yeah, it's down there. It's the  
11 first third or so. It's my recollection in the discussion  
12 back in our September meeting that 60,000 CSF was somewhat  
13 of a threshold to have enough energy on pulse flows; is  
14 that true

15 MR. DANIEL: That's true, and I appreciate  
16 you bringing that up. I have had sort of an epiphany in  
17 the last few days looking at these daily flows. If you  
18 looked at the average, and this is -- and this is a  
19 confession --

20 MR. MADIGAN: Easy.

21 MS. McPEAK: We are all jealous that you had  
22 the epiphany and we didn't so --

23 MR. DANIEL: I won't go any further on that.  
24 60,000 CSF is a flow that's very important to the  
25 channel-forming processes in the Sacramento River, 60,000

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1 Now, an example of where they may have gone  
2 wrong in terms of looking at this kind of an example is on  
3 the Stanislaus River where the New Malones River and  
4 reservoir can capture these massive flows on a smaller  
5 scale and in the Stanislaus, but the New Malones can  
6 capture the flows that nature would have provided to  
7 generate the meander of gravel movement on the Stanislaus.

8 MR. MADIGAN: Dick, we just saw five members  
9 of the audience who said that I could put enough concrete  
10 on the Sacramento River, you need to know.

11 MR. DANIEL: I don't think so. Okay. Let  
12 me --

13 MS. McPEAK: Byron has a question on this,  
14 too.

15 MR. BUCK: But they're not willing to pay for  
16 it. Actually, seriously, Dick, you're saying that  
17 maintenance of the pattern is really key to restoring the  
18 fisheries

19 MR. DANIEL: We strongly believe -- I  
20 strongly believe that looking at the pattern is the key to  
21 coming up with the broad integrated ecosystem process that  
22 we want to go forward with; and furthermore, it makes  
23 sense that the species that are dependent on our system  
24 evolved to deal with this variability and are not in a  
25 situation where they have to take chances that something

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1 like that is going to happen. That doesn't make sense in  
2 nature.

3 MS. McPEAK: Dick, I assume that the intent,  
4 the outflows and the even the averages were of a  
5 sufficient temperature and that these outflows based on  
6 the science that you know are sufficient for supporting  
7 fisheries as a component of healthy ecosystem?

8 MR. DANIEL: We saw the results this year.

9 MS. McPEAK: Okay.

10 MR. DANIEL: We saw the results this year.  
11 We had an extraordinarily abundant salmon run. We saw the  
12 temperatures and certainly these temperatures were  
13 adequate.

14 Another feature of this particular feature is  
15 that in a very real sense most of these flows are  
16 unimpaired flows, and by way of explanation, review of  
17 reclamation has to operate Shasta Dam with a considerable  
18 amount of flood control, flood management concern in the  
19 upper Sacramento River. That's due in a large part to the  
20 fact that there are a number of smaller tributaries to the  
21 Sacramento River which are not dammed, Cottonwood Creek,  
22 Deer Creek, Mill Creek, and what you see here is that a  
23 major contribution from those smaller tributaries, and  
24 during events like this one I would imagine the Bureau is  
25 trying to hold back water in Shasta in order to mitigate

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1 endangered species. Is there any correlation between the  
2 amount of monthly flows and the low abundance of that run  
3 of salmon?

4 MR. DANIEL: This is the time of year when  
5 spring run enter fresh water and migrate upstream to  
6 spawn. Spring run historically had utilized the smaller  
7 tributaries and spring run moved very -- would move very  
8 far upstream on an undammed stream in order to spawn.  
9 Part of the strategy associated with that is that spring  
10 run adults hold throughout the summer at these higher  
11 elevations smaller tributary streams where the water is  
12 cold and they spawn in the late September, early October  
13 time frame.

14 So one of the critical factors for spring run  
15 is getting to where it's cool enough to where the adults  
16 can hold over all summer long. Deer Creek, Mill Creek,  
17 Battle Creek, Butte Creek are classic examples where snow  
18 melt sustains the flow of those streams throughout the  
19 summer, and it's very, very cold water.

20 After they have spawned and their young rear,  
21 spring run tend to move out in this time frame and you can  
22 see that this was a pretty good situation for spring run.

23 Another adaptor feature of spring run and  
24 these are wonderful animals, if they don't see this kind  
25 of flow, and I don't know how the process works, there's

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1 the flood impacts associated with the high flows.

2 These are the kinds of flows that come out of  
3 the tributary streams. They are cool. They have a fairly  
4 high tributary which seems to be a triggering mechanism  
5 for a fair amount of behavior in our fish and they are  
6 also nutrient rich because they are coming down from the  
7 upper water sheds and bringing nutrients which were during  
8 the summer and bring it into the system. These are the  
9 kinds of flows that later on trigger plankton runs which  
10 are very important in terms of the ecologists of the  
11 species. I know that this is a lot of biology but I don't  
12 ever get to do that.

13 MR. PARRAVANO: Yeah. I just have a  
14 question, and by looking at the monthly average flows and  
15 seeing when the runs of the salmon runs are significant  
16 throughout the year, to me it seems like the lower the  
17 flow is indicative of the -- for the fall run. That is  
18 when -- that is the most abundant salmon stock that we  
19 have.

20 Now, the other one of the other runs is the  
21 spring run, and to me it looks like the spring run is  
22 significant that the average flow starts increasing a  
23 little bit, and we note that the spring run is a candidate  
24 for listing, and the other run, the winter run which  
25 occurs during the highest monthly flow is on the

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1 got to be some magic trigger mechanism, but spring run  
2 have the ability or have adapted to the circumstances  
3 where on many occasions, and I will show you some figures  
4 later on, they don't get these kinds of flows. Once again  
5 we have a very erratic hydrograph. They can hold over and  
6 migrate out a year later, more or less, in this time frame  
7 as yearling fish. That's what evolution is all about,  
8 that's what adaptation is all about and that's part of the  
9 magic of some of the things we look at.

10 Winter run on the other hand move up during  
11 the wintertime as adults, spawn immediately, they don't  
12 hold over, and there young spend the summer in the river  
13 and they move out in the following fall and early winter  
14 when we get high flows. Part of the problem we have for  
15 winter run is that they no longer have access to the upper  
16 reaches and the high elevation streams, and we are now  
17 managing through water operations and through a  
18 temperature control device at Shasta to try and frankly  
19 artificially create cooler conditions in the Redding area  
20 than nature would have provided.

21 It didn't matter to winter run in the past  
22 how hot it got in Redding because they were way up on the  
23 McCloud River where again snow melt and glacier melt kept  
24 that waters cool all summer long but you see a lot of --  
25 now in a situation like this water year Shasta water

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1 obviously had a lot of carry-over storage. They had the  
2 ability, and in fact we did in 1995 to make bottom oasis  
3 out of Shasta to get at that cold water layer that was at  
4 the bottom of the reservoir. We were able to keep a very  
5 significant portion of the Sacramento River below Shasta  
6 artificially cool.

7 So we did pretty well by winter run in 1995,

8 MS. NOTTHOFF: So it's useful for purposes of  
9 illustration here to see you said that within a wet year  
10 like the one that you have got modeled up there that there  
11 is not enough concrete to hold back the flows on the  
12 Sacramento. I've already been corrected on that. Okay.  
13 But I would -- if every year were like 1995 I don't think  
14 that we would be here. So how does that -- what does that  
15 do to a dry and critical year? I mean that is the more  
16 key issue here.

17 MR. SNOW: I want to get into that, but also  
18 since there was the challenge to all engineers to find  
19 enough concrete --

20 MR. DANIEL: You don't use any spawning  
21 gravel to build that concrete.

22 MR. SNOW: I was going to make it point at  
23 the end there is a number of science panels that we need  
24 to convene on some key issues as we move forward. One of  
25 them I have already mentioned in regard to this to really

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1 be the maximum size of an efficient fishing stream.

2 We did not divert any water at flows below  
3 25,000 cubic feet per second. That is a conservative  
4 estimate of the amount of water that you might need to  
5 meet existing regulatory requirements and existing demand  
6 so you are not robbing Peter to pay Paul in this concept.

7 The actual model number is somewhat lower  
8 than that but I didn't concede too much on this one. I am  
9 going to start you off with the water year 1982. Again  
10 all of these are on the same scale, all of them are the  
11 gauge at Hamilton City, all of them are daily flows and  
12 all of these examples are based on the standard water year  
13 which runs from September or October 1 through September  
14 of the following year.

15 What we have here is a pattern in 1982  
16 smaller in scale but not at all dissimilar to that example  
17 of 1995 that I showed you. We have got the peaks in  
18 March, we have got the peaks in the spring, we have a  
19 relatively flat flow that was probably a function of  
20 operation in Shasta in the fall spawning period, and I  
21 hope that you can see we superimposed on this a line  
22 equivalent to 5,000 CFS. What we would do under this  
23 example is crop the peak flows down to 25,000 cubic feet  
24 per second and put them into storage. I can't remember  
25 the number.

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1 talk about the appropriate triggers. Well, there is  
2 another key piece to this and it's the issue of the health  
3 of the bay, and we know that some of these peak flows play  
4 a roll on what is called the fresh water lens in south San  
5 Francisco bay. That is an issue that the GS has been  
6 looking at and needs to be dealt with, and so there is  
7 potentially a constraint on this that regarding these peak  
8 flows that have nothing to do with moving rocks or have  
9 nothing to do with how much concrete is available it has  
10 to do with a relationship with the health of the bay  
11 and so that is something that we have to deal with as we  
12 move forward.

13 MR. DANIEL: For the example I am just going  
14 to move through a few, go ahead and put those up, through  
15 a few years in sequence to show you how way might be able  
16 to grab some water and put it into off stream storage and  
17 reuse it for various purposes.

18 The first assumption that I worked with on  
19 this example, I'm not a very -- I am not good at all with  
20 computers most of this was done more or less by hand. We  
21 assumed that the rate of diversion to off stream storage  
22 won't exceed 5,000 cubic feet per second. The engineers  
23 tell me that that is a practical cut-off point in terms of  
24 costs and feasibility for a pumped-storage program. This  
25 is also right there in the ballpark for what we believe to

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1 This is that same water year without the  
2 little red tags on it. That starts to give you a little  
3 bit of a model as to how this would work. We start out  
4 with zero water in storage. There were eight days during  
5 this time period where water could have been diverted to  
6 storage under these assumptions, one day at 5,000 cubic  
7 feet per second, it's 10,000 feet roughly. We followed  
8 the assumption that we have been using in some of our  
9 planning efforts that one-third of the water put into  
10 storage in this scenario would be allocated to ecosystem  
11 purposes, and as the ecomanager associated with this it  
12 particular example, I conclude that had we didn't need to  
13 augment flows in the March time frame because we had these  
14 out migration flows, we didn't need to augment flows in  
15 the Sacramento River during the early spring or may time  
16 frame because we had flows that got up as high as 60,000  
17 cubic feet per second we had a pretty darn good year so we  
18 cared over this 200,000 acre feet of water that we had  
19 from environmental storage and we carried over just  
20 because I didn't know what we would have done with urban  
21 and ag water. We carried this water over as well and  
22 continued to do so in this example.

23 Then came along 1983 which was by definition  
24 of the State Water Resources Control Board and the Water  
25 Project Operators "a wet year." A wet year because we had

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1 all of this accumulated run-off, a Godly amount of water  
2 was put into storage, but in our minds as fishery  
3 biologists it may well have had a deficiency during this  
4 May time frame when we normally expect a regularly  
5 recurring outflow event to occur.

6 In nature in the absence of the reservoirs in  
7 the system this kind of a flow event quite probably would  
8 have occurred. Those of you who are familiar with water  
9 project operations and the overlying concerns for flood  
10 control know that this is about the time when the  
11 reservoirs can start building up storage because the  
12 threat of floods has passed, and this is something we see  
13 on a fairly regular basis where they reduce releases to  
14 the streams in order to accrue water for storage for  
15 beneficial use. We get a little storm and they're all of  
16 an sudden right back into their flood envelope and they  
17 have to make a release.

18 In this case it would have been better if  
19 that release were a little bit later on, but what we did  
20 in this example is we spent 230,000 acre feet of water to  
21 try and replicate in the system this flow event that we  
22 think is very important.

23 Then came along 1984. Again, a wet year, a  
24 wet year but all of the wet occurred in the early winter  
25 period, December and January for reasons which none of us

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1 we have stored in the ground during more abundant years  
2 and the ecosystem share of that. This is where the market  
3 might come into play and water transfers for the purposes  
4 of dealing with environmental needs, and most certainly  
5 this is the kind of situation where additional flexibility  
6 in terms of project operations in the Delta could go a  
7 long way towards mitigating the problems associated with a  
8 dry year. It's not necessarily a disaster but this is  
9 where the CALFED group gets the work and this is where all  
10 of the other tools that are available to us in the system  
11 get utilized.

12 Things got a little better in 1986. We did  
13 have some water that we built up, not a whole lot. We  
14 used it to replicate the May flow.

15 In real life a team of managers would be  
16 looking at this, they would be evaluating the condition of  
17 various target species. They would be weighing the pros  
18 and cons of spending this water to do Delta smelt good or  
19 to do spring runs good or whatever the highest priority  
20 might be, and those priorities would hopefully change over  
21 time. It has to be a fairly real-time decision-making  
22 process, and that's why we have talked a lot about putting  
23 water into storage and using it at the discretion of a  
24 team of managers who are looking specifically at  
25 environmental concerns and who have the authority to take

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1 will fully understand, and it stopped raining big time.  
2 We did get a storm in March, a miracle March as I recall,  
3 but it didn't get up to the magnitude that we would like  
4 to see nor did we get the flow event that we would like to  
5 see in the environment during the month of May.

6 For this example we followed the guidelines  
7 that we have outlined in the ERPP for an above-normal  
8 year, and we released water sufficient to bring these flow  
9 events into play during the system, and what we did is we  
10 spent all of our water that was accrued in this scenereo  
11 in this offstream storage.

12 For those of you that were at the CALFED  
13 policy meeting the other day, this is different from what  
14 I presented there. I think we looked smarter there.

15 But along came 1985, a dry year. We had  
16 spent all of our water moving into this year in terms of  
17 the ecosystem allocation of water. We accrued very little  
18 additional storage in this particular scenario because the  
19 flow was very seldom over 25,000 cubic feet per second at  
20 Hamilton City, and we did not have in storage in this  
21 scenario the water necessary to meet the ERPP objective of  
22 two, ten-day 20,000 cubic feet per second pulse.

23 This is where -- this is a situation where I  
24 retire and go fishing, but in reality this is where we  
25 look at conjunctive use of ground water and the water that

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1 risks on behalf of the environment, risks that urban and  
2 agricultural project managers can't take.

3 And finally we end up in this particular set  
4 of sequences with a deficit from storage available to deal  
5 with yet another dry year in 1987.

6 As all of you know '88 didn't get much  
7 better. '89 was only fairly good, and this was the advent  
8 of a fairly substantial drought, one of the more  
9 significant droughts that we ever had to deal with, but  
10 the story here is that by manipulating this water by  
11 capping off some amount of peaks we were able to build  
12 some resilience into our populations. We were actually  
13 able to create a situation through some water management  
14 where we had several consecutive years of strong, could  
15 have had several consecutive years of strong populations  
16 of our endangered species and those that are harvested in  
17 the ocean by in large we built through this kind of  
18 scenario a resilience back into the system and that does  
19 not address the fact that a very, very significant portion  
20 of the CALFED program involved rebuilding habitat to allow  
21 these fish to continue to flourish and obtain even greater  
22 resilience.

23 I'm sorry for taking so much time. This is a  
24 lot of fun compared to what we normally have to do for a  
25 living. Any questions?

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1 MR. MADIGAN: Questions. Tom.  
2 MR. DECKER: Just a couple of quick  
3 questions. One is has this kind of an approach been  
4 evaluated by a peer view or scientific objective process?  
5 And then the other is your focus primarily in  
6 the presentation was on specific fish species. Is this  
7 the way to handle the ecology ecosystem broadly of the  
8 ecosystems that were addressed here.  
9 MR. DANIEL: Tom, this is a very limited  
10 example. I did have some of this material prepared and  
11 carried it around in my briefcase.  
12 During the scientific package review that we  
13 had last October I wanted to talk to them about it. I had  
14 a very, very brief opportunity to lay this out for them,  
15 and frankly I'm not sure that tht was the peer group that  
16 needs to debate, discuss and evaluate this concept. This  
17 is the sort of thing that I'll be talking about later on  
18 today, that is a very key question that needs to be  
19 evaluated through what we are calling the Ecosystem  
20 Science Program that we are building for CALFED.  
21 There isn't too much theory involved in this  
22 because I'm using straight-forward examples and overlaying  
23 fish species that are of concern and that are in the  
24 system, but this is one river system. We have every  
25 reason to believe that there is variability amongst the

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1 species adaptation in the various river systems that we  
2 have.  
3 Furthermore, in some cases species that  
4 evolved in a particular river system, and I'm speaking  
5 here about the San Joaquin tributaries, the main species  
6 of salmon or race of salmon that used to occupy the San  
7 Joaquin tributaries was the spring run. The spring run  
8 has been more or less extirpated from the San Joaquin  
9 system by the dams that were constructed and closed off  
10 access to the higher elevations where the cool water was  
11 available. And what we have now is a fall run that has  
12 occupied the system and seems to be hanging on. So one  
13 size does not fit all.

14 I brought this example to this group to get  
15 people sometime late about thinking about these concepts.  
16 It has to go to a much broader scientific panel for  
17 additional evaluation, but I think this is a pretty good  
18 starting point to get us thinking.

19 MR. MADIGAN: Additional questions? All  
20 right.

21 MS. McPEAK: I thought Byron had a question.

22 MR. BUCK: No.

23 MR. MADIGAN: I did see somebody from the  
24 audience that wanted to -- yes, ma'am. Come up to the  
25 microphone and identify yourself and go ahead and ask your

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1 question.

2 I am Linda Coyle, [ph.], from Valley Water  
3 Protection Association, and I just have one question about  
4 the assumptions on your presentation on the fish runs.  
5 are you assuming that you must maintain these conditions  
6 yearly for the fish runs or is there some kind of critical  
7 pattern, a repetition that may be these conditions must  
8 exist at minute every two years, to maintain a healthy  
9 run?

10 MR. DANIELS: Again, sort of the technical  
11 response is from a channel-forming process standpoint by  
12 and large the assumption is that if you get the  
13 appropriate flows every third to every fifth year you're  
14 in pretty good shape.

15 From a salmon standpoint, as we go forward  
16 and recover our salmon population also we will -- we hope  
17 not to be dependent on the assisting three-year cycle but  
18 rather can rebuild the populations such is that we have  
19 fish that come, a portion of each population that comes  
20 back and spawns at four years or five years or even six  
21 years. That is again part of the natural resilience that  
22 is built into the biology of these critters.

23 When you look at Delta smelt which are a  
24 one-year species, they tend to overcome the vagaries of  
25 California's hydrology by being very adaptive, by being

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1 able to move to where they need to be. What we do with  
2 Delta smelt is we try to recreate the linear habitat that  
3 they seem to have evolved to take advantage of; so if it's  
4 dry they move upstream, if it's wet they have habitat  
5 downstream. Those are the sorts of things that we are  
6 looking at.

7 MS. COYLE: So are you then going to be using  
8 the most vulnerable fish species to drive this cycle  
9 process in terms of the minimum flows?

10 And will you be using an exotic species or  
11 will you be using something like the salmon that isn't as  
12 exotic.

13 MR. DANIEL: I didn't mention Striped Bass or  
14 American Chad which are the two most popular exotic  
15 species that we have in this system. They obviously do  
16 pretty well in these flow regimes like the example in  
17 1995, but that is not driving our analysis.

18 We are trying to get back to a serious look  
19 at how the ecosystems functions and the processes that are  
20 supported by the system. That was the system that these  
21 species evolved to. In terms of looking at the most sense  
22 tive species, we can't escape the fact that we have a  
23 number of endangered species in this system, we can't  
24 escape the fact that that has to be a number one priority.

25 But what we see when we look at these

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1 patterns is that there isn't a conflict between Delta  
2 smelt and salmon. They all evolved in this same system,  
3 they take advantage of different components of the system  
4 but they all evolved to take advantage of these regularly  
5 recurring patterns.

6 MS. COYLE: One final question and then I'll  
7 let you get back. So do you foresee that once the fish  
8 population is not so vulnerable that you wouldn't be  
9 needing to maintain these minute-flow regimes quite so  
10 rigidly?

11 MR. DANIEL: The "quite so rigidly" part  
12 allows me to agree; but once they recover, we can't let  
13 them slide backwards again. We are trying to re-establish  
14 a new and much higher baseline, and we are committed to  
15 maintaining that baseline.

16 MS. COYLE: Thank you.

17 MR. MADIGAN: Okay. Thank you.

18 Bob Raab.

19 MR. RAAB: What I have been hearing is  
20 something I don't think I've heard before in the halls of  
21 CALFED and that is that there is some importance to having  
22 outflows into San Francisco and San Pablo and into the  
23 San Francisco Bay, and I find that heartening. I'm going  
24 to withdraw my request that I made at the second meeting  
25 here in 1995 that we eliminate Bay from the Bay Delta

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1 the science we know performance of the ecosystem and  
2 outflow and the timing of out flow, I think is very  
3 critical.

4 I am glad to hear Bob Raab speak because when  
5 we did talk about the South Bay and you had told me about  
6 the lens phenomenon in the South Bay, it was the first  
7 time I too had heard it and I was afraid that the  
8 significance of that might get missed in this discussion.  
9 I hope that what you will do is take the direction of this  
10 analysis, and we will really accelerate coming to some  
11 specific recommendations on performance standards,  
12 performance indicators that would come from those  
13 standards for the estuary. I think that is the only way  
14 that there can be some assurance that the overall solution  
15 and the component of the overall solution are being  
16 discussed in a sincere way for the health of the estuary.

17 So I don't know if we could -- how fast  
18 you're planning to do this, Lester and Dick, but when we  
19 next meet if there could be a refinement around this, I  
20 think that this is the most important piece of  
21 building-block information actually to go into the  
22 EIR/EIS. So we are finally getting to the heart of it,  
23 and it's really important what you're doing. Thank you.

24 MR. SNOW: Thank you, Sunne.

25 MR. MADIGAN: Richard, briefly.

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1 program of CALFED.

2 I heard a former member of BDAC who I think  
3 is quite influential and articulate say that it's time to  
4 stop wasting water in San Francisco Bay, and this would  
5 indicate to me -- this isn't a question. I was going to  
6 ask you a question, but it indicates to me that there is  
7 more emphasis on CALFED's part to the restoration program  
8 to consider the value in the foodweb in San Francisco Bay  
9 and the efficacy and desirability of flows; is that a fair  
10 statement, Dick, or have you been saying this all along  
11 and I just didn't hear it?

12 MR. MADIGAN: Lester?

13 MR. SNOW: I think we've been trying to say  
14 that all along the importance of the entire foodweb and  
15 many pieces of which are not totally known; hence the  
16 issue of the adaptive management. But you're right on,  
17 Bob.

18 MR. RAAB: Okay.

19 MR. MADIGAN: Sunne.

20 MS. McPEAK: Lester and Dick -- Mr. Daniels  
21 is back there.

22 I want to tell you that I find this  
23 presentation very helpful and really a significant step, a  
24 long, big step towards where I hope we will get and that  
25 is being able to state as specifically as we can based on

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1 MR. IZMIRIAN: I was -- I'll be brief. I was  
2 delighted with the recognition of the flows as part of the  
3 ecosystem and habitat.

4 I think also implicit with Dick's comment,  
5 that there are also a lot of species, specific impacts  
6 that have to be addressed within this. We have heard a  
7 lot of generalized statements about the value of ecosystem  
8 management and recreating natural conditions. We do have  
9 to stay cognizant of these specific impacts of barriers  
10 and entrainment.

11 MR. MADIGAN: Fair enough.

12 Lester, do you want to wrap this up?

13 Bob?

14 MR. MEACHER: I have a very short question,  
15 and a very short answer might be premature. Is there any  
16 ballpark figure on what a storage facility like this would  
17 cost yet?

18 MR. MADIGAN: Lester?

19 MR. SNOW: We have a variety of cost  
20 estimates. As you know, we have got a lot of different  
21 storage issues on the table, conjunctive management as  
22 well as a variety of reservoirs that we have talked about.  
23 We have different cost estimates. I am trying to think, I  
24 am going to say a number and then ask Mark to correct me,  
25 but I think if I remember right, our estimates on

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1 something like the reservoir that you probably have heard  
2 people talk about on the west side of the Sacramento  
3 Valley, I think our cost estimates on that with all of the  
4 appurtenant facilities is around 1.5 billion dollars; is  
5 that right, Mark?

6 AUDIENCE MEMBER MARK: That's close.  
7 Something like that.

8 [Discussion off the record.]  
9 MR. MADIGAN: Go ahead, Lester.

10 MR. SNOW: Thank you, Gary. Is that  
11 officially the peanut gallery back there? I can't  
12 remember.

13 I wanted to close this out temporarily  
14 quickly because there is some issues that we want to flow  
15 out of this, but I know that Mr. Pettit is here and I  
16 believe Mike wants to get to that issue. So let me make a  
17 few comments and I'll get back to them so don't feel like  
18 I'm going to rush something by you that you can't question  
19 in a moment, but to kind of pick up, this is -- I showed  
20 this earlier and by overlying two graphics, those are the  
21 problematic level at which we are working right now, those  
22 kinds of concepts. To make this real you have to do a lot  
23 of details work as you move forward, particularly into  
24 Phase III?

25 The final concept I wanted to lay out, I

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1 mentioned that there is all of these different tools, we  
2 just went through a detailed example that uses storage and  
3 storage is both surface storage as well as conjunctive  
4 management, but there is all of these other things going  
5 on.

6 All of the alternatives that we have uses all  
7 of the tools so there isn't -- it isn't a situation where  
8 you decide, well, we are going to use storage to solve all  
9 of these problems. And see we have alternatives that  
10 don't have surface storage, use conjunctive management,  
11 transfers, water efficiency, ecosystem all of that kind of  
12 stuff going on.

13 The point I want to make, and we will get  
14 back to this and get into a couple of issues when we look  
15 at a Water Management Strategy, you have to employ all of  
16 these activities. So if you've kind of followed our last  
17 work, the last alternatives we have, alternatives that  
18 show 3.8 million acre feet of call it demand management  
19 through conservation and recycling, transfer induced  
20 conservation, that type of thing going on to move down  
21 from the range as projected by the State and on the other  
22 side, the other set of tools, conjunctive tools and  
23 transfer induced conjunctive tools as well as facilities  
24 such as storage to try to deal with this from both sides.

25 So there is not an alternative that simply

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1 says here is how we are going to solve the problem, nor is  
2 is there an alternative that only comes down from this  
3 side. We have got all of the pieces and then there is a  
4 lot of decisions to be made and that is the essence of how  
5 we put these packages together. So I want to make that  
6 point. I definitely will come back to this but I would  
7 like to break here and turn it back to the chair.

8 MR. MADIGAN: Thanks, Lester. Because of the  
9 communications of the last seventy-two hours or so the  
10 questions that were raised this morning regarding the  
11 subject of the Water Rights proceedings and the possible  
12 conclusion in maybe mid-1999 instead of some of the dates  
13 that were being earlier discussed, we asked Walt Pettit  
14 and Terry John's if they could wander over from the State  
15 Boards, and indeed wander they have. I would say that  
16 certainly their informational report to you is a  
17 legitimate subject before the House today and certainly to  
18 the extent that their questions that they are in a  
19 position to answer that is legitimate.

20 It would not be legitimate for this group to  
21 want to take some sort of a position on the matter today  
22 as it has not been properly noticed, nor would we want to  
23 send a letter or something like that as a result of the  
24 conversations today. If you wish to have this item  
25 further before the Board we would need to schedule it and

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1 notice it. Okay.

2 Walt, welcome. Thank you very much for  
3 taking the time to come over here and join us.

4 MR. PETTIT: Thank you, Mr. Chair.

5 Can everybody hear me on this? Thank you. I  
6 started to say this was an unanticipated invitation, and I  
7 suspect maybe unplanned would be a better word. In any  
8 event, I don't have a prepared presentation to make.

9 I understand I have been told a bit about the  
10 discussion this morning, and I understand that there may  
11 be a couple of things that the group would like to inquire  
12 about, and my understanding is that one of those might be  
13 what the Board did or the basis for its decision, and  
14 secondly the impact that might have on BDAC's and CALFED's  
15 activities what the long-range effect of that might be.

16 So in the absence of my presentation that  
17 might wander off of what you're really interested in, I  
18 think that I would just propose to invite questions.

19 MR. MADIGAN: Well, those are perfectly  
20 legitimate questions to start with. Why don't you take  
21 those and then we'll go from there.

22 MR. PETTIT: Well, we've been hearing  
23 informal requests that go back a couple of months that it  
24 might be profitable for everybody's interest to at least  
25 restructure the hearings that were scheduled to begin on

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1 March 9th in order to bring up the question of the  
2 agreements that have been reached and those that are  
3 either close to fruition or could possibly come to assess  
4 whether these agreements would provide part of the  
5 solution to the allocation of responsibility in question  
6 and hopefully get some of these issues out of the way to  
7 reduce the degree of the controversial issues in the Water  
8 Rights Hearing that will eventually have to follow the  
9 evidenciary process that we had planned for March.

10 As you know, there are several agreements  
11 that have been reached that the Board has not reviewed  
12 yet, and mainly the Suisun Marsh Agreement, the Macholony  
13 agreements, the Yuba County agreements. There is a  
14 potential for more information in the Sacramento Valley  
15 and possibly one of the most contentious and could solve  
16 problems if it panned out and was successful was the  
17 Veralis Agreement being put together by the San Joaquin  
18 Tributary Interest.

19 We have consistently advised people that the  
20 Board was just part of the bigger picture and we needed a  
21 degree of consensus before the Board would change any of  
22 these dates because we were -- my Board members were  
23 thoroughly committed to attempting to complete their  
24 obligation to deliver a decision before the end of 1998  
25 recognizing, however, that if we didn't delay a fully

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1 that it might stage the ultimate decision at a later date  
2 but that it might also greatly reduce the degree of  
3 controversy, and I guess the bottom line was there was a  
4 conclusion that we would be doing a disservice if we  
5 didn't give serious consideration to these agreements and  
6 see if they could be employed out within some reasonably  
7 short time frame.

8 So that resulted in the letter that I sent  
9 out about a week ago and we have since put out a notice of  
10 both extending the time for comment on the EIR that we had  
11 circulated and restaging the process to announce the  
12 commencement of a workshop in about mid-April to hear the  
13 status of those agreements, and from that date the Board  
14 would proceed forward to decide whether we could rescope  
15 the hearing to make determinations on those agreements and  
16 proceed then with a reduced scope for the remaining issues  
17 that hadn't been settled or whether we would find.

18 I think this has to be recognized as a  
19 possibility, that the Board would conclude that despite  
20 the advanced publicity, that the agreements had not worked  
21 and we would then have to return to the process that was  
22 scheduled commencing March. So that was the rational  
23 behind it.

24 I think to get to the second question that I  
25 posed that I gather you concurred in: What is the impact

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1 adversary hearing, that the changes of that were pretty  
2 slim.

3 We also were very interested in this  
4 potential for reducing the scope of the controversy by  
5 giving some consideration to these agreements so as they  
6 proceed and got intensive and the questions got more  
7 specific or more formal, we put out two basic messages and  
8 that is, number one, that if there was a change in the  
9 process that caused the delay or caused the Board to  
10 eventually get to a full terminal decision at a later  
11 date, that the Board had to be assured that the existing  
12 standards that are being met will continue to be met  
13 throughout the dependency of any administrative action  
14 before the Board, and that was a primary condition, a  
15 signal that we sent loud and clear to everybody who asked  
16 and it's one that I think is a base condition with the  
17 Board.

18 The second aspect of it was that if we do  
19 this, that everybody needs to recognize reality and  
20 realize that if we restage the process to look at these  
21 agreements and then have the Board give a signal based on  
22 what they hear as a result of the testimony on these  
23 agreements, that the nature of our process requires that  
24 the successful determinations are going to take more time.

25 So it was a trade-off basically, recognizing

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1 of the CALFED process?

2 Frankly, I don't think it has an impact. I  
3 think CALFED is in the process right now of trying to get  
4 the ecological restoration project on line. More  
5 importantly than -- well, not more importantly but  
6 probably more long-term, I think, CALFED is wrestling  
7 pretty successfully, although that schedule keeps getting  
8 deferred to, is wrestling pretty successfully with the  
9 long-term solutions that will be necessary.

10 I think I need to back up a moment there and  
11 give a perspective on the process because you have to  
12 realize that what the Board's process is doing right now  
13 is no more than allocating responsibilities for the  
14 present standards that are in place, and that process can  
15 proceed independently of CALFED's determination of what  
16 the ultimate system is going to look like and what  
17 physical facilities or other measures, operational or  
18 anything else, will be in place as part of a long-term  
19 solution.

20 It has always been our perception that we  
21 have to go through this effort to allocate the  
22 responsibility and to meet the standards for the next  
23 several years, but that ultimately when CALFED comes up  
24 with a permanent solution, that any change in physical  
25 facilities operational constraints and so on is probably

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1 going to results in new standards being imposed. If  
2 nothing else, it will be a different location that will  
3 have to be considered, and so we have always envisioned  
4 that there would be a further process where we would have  
5 to come back, look at the allocations and standards  
6 themselves and the allocations that would be met the first  
7 time and revise those, and I don't think this change would  
8 change that in the least, and I don't see any impacts on  
9 this decision and the need for CALFED to proceed toward  
10 the long-term solution, and I will stop there.

11 MR. MADIGAN: Thank you. Alex and Hap.

12 MR. HILDEBRAND: Walt, in assessing the  
13 likelihood of these agreement being reached which is a  
14 basic point in whether you should delay the hearings, you  
15 must look at both the probability of their being reached  
16 and the question of whether the agreements would include  
17 all of the significant interests that would have appeared  
18 before in hearing. Have you got some comments about that?

19 MR. PETTIT: We certainly did think about  
20 that, and I have pointed out that for the last several  
21 years the Board has admonished all of the parties to the  
22 agreements that when they come back in, that the Board is  
23 going to be looking to the degree of a consensus on the  
24 conclusion of all of the parties, and we are well-aware  
25 that some of the parties do not feel that they have been

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1 included to the extent they want to on some of these  
2 agreements, I think that diminishes the chances of their  
3 success.

4 But as I say, the message the Board has sent  
5 has been clear and that is when they look at the  
6 agreements they are going to be looking at whether or not  
7 there is a real consensus or whether it's agreement  
8 between several of the parties who have similar interests  
9 and everybody else is out in the cold. So that is a  
10 critical item.

11 If I can be skeptical for a moment. The  
12 history of agreements in the Bay Delta proceedings hasn't  
13 been all that good with the exception of the accord, and I  
14 think that we all know what events led to its success.  
15 However, I think our conclusion generally, and it's not  
16 specifically my conclusion, was that the possibility of  
17 success of these agreements was something that could not  
18 be dismissed lightly, but if these agreements are  
19 successful, were so greatly -- be so greatly to the  
20 advantage of all of the parties as opposed to an  
21 adversarial process that could drag on for several years,  
22 that we could not pass up the opportunity to review those  
23 agreements and see if they would be successful. And I  
24 might point out there are numerous legal mechanisms that  
25 any party that wants to disrupt our adversarial proceeding

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1 could use, and there is probably as much chance that they  
2 would be successful in that effort as there is that the  
3 agreements would fall apart, so it's a risky  
4 determination.

5 The conclusion was that we've got to get  
6 those agreements, the agreements and others a couple of  
7 months to give people a shot at pulling them together.

8 MR. MADIGAN: Hap

9 MR. DUNNING: With so much emphasis being put  
10 on these negotiated agreements, I wonder what are the  
11 implication to the Board's responsibility to look at the  
12 reasonable solutions and to which negotiations are going  
13 on? I'm thinking particularly about the possibility of  
14 releases from Friant Dam to meet the flood release  
15 standards.

16 MR. PETTIT: I think that is an issue that  
17 will be raised the Board hasn't dealt with and will have  
18 to speak to because the issue won't go away, and I don't  
19 know what the response would be.

20 As I say, I know that these agreements are  
21 just that, they are proposed agreements. When they come  
22 before the Board they would each be one piece of evidence  
23 before the Board, and it does not relieve the Board in any  
24 way of its responsibilities for either reasonableness,  
25 public trust or Water Rights determinations. So it's --

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1 that's one of the number of critical issues, and as I say  
2 to reiterate, the key is that all the agreements in the  
3 world will still become one piece of evidence before the  
4 Board, and the agreements can't authorize them to evade  
5 their responsibility.

6 MR. MADIGAN: Tom.

7 MR. GRAFF: Well, the day before you wrote  
8 your letter to Mr. Patterson and Mr. Kennedy, they wrote  
9 to the Chairman of your board, and their letter concluded  
10 as follows: "As you know, the projects are committed to  
11 implementing the plans objectives through December of 1998  
12 in accordance with the recent extension of the Bay Delta  
13 Accord. Reclamation has not agreed to extend this  
14 commitment but may be willing at a later date to consider  
15 a limited extension if necessary to facilitate conclusion  
16 of the Board's hearing process. The Department is  
17 similarly willing to consider an extension if necessary to  
18 complete the Board's process; nonetheless, reclamation and  
19 the Department believe the processes should be completed  
20 by December 31, 1998."

21 The next day you wrote them back saying your  
22 concurrence that a phased SWRCB proceeding could result in  
23 DWR and USBR continuing to guarantee adherence to the 1995  
24 Delta standards beyond 1998 makes such a restructuring and  
25 possible restructuring you referred to, and then you go on

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1 to say on to June, August 1999.

2 Is it your understanding that they are now in  
3 agreement that they will abide by the standards through  
4 June and August of 1999?

5 MR. PETTIT: To back up maybe a little bit in  
6 reverse order, I'm not sure what the Bureau's current  
7 position is. I have been assured that the Department  
8 would agree to meet their share of that obligation.

9 I would just point out that the inconsistency  
10 or at least seemingly inconsistency that you referred to,  
11 Mr. Graff, should not be a surprise because we have been  
12 discussing these issues for a matter of weeks. We knew  
13 what form of letter people were considering writing. The  
14 Board had made it very clear an absolute condition of the  
15 restaging had to be a continuance of the obligation of the  
16 projects to meet the standards, and we told the two  
17 project operators as well as a number of other parties  
18 that if you posed the question this way, here is the  
19 answer you are going to get, and the true conditions were  
20 the standards have to be met and this will potentially  
21 impact the schedule.

22 So you're right, we said we will do it, but  
23 here's the conditions, and my only point is that those  
24 conditions should not have been any surprise.

25 MR. MADIGAN: Roger.

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1 now or upon further reflection just so that we can do  
2 whatever is possible within our purview to make your task  
3 as easy as possible.

4 MR. PETTIT: Just a couple of more or less  
5 random thoughts, and I will give that some more thought  
6 but I know Mr. Snow has been widely quoted as saying that  
7 he is undertaking a serious effort here in the next few  
8 months to greatly increase the number of people who  
9 understand what CALFED is doing. Since the questions that  
10 have been raised about our inner tie to this new, we would  
11 certainly be happy to help fluster and particularly if it  
12 involves clearing up any misunderstanding about our  
13 activities with respect to relations with the CALFED  
14 activities. So that might be one form of hopefully an  
15 educational process we could go through for people who are  
16 interested but not familiar with the details.

17 And secondly, we just came off of a day and a  
18 half of CALFED policy meeting the other day. I think  
19 there was a strong sentiment by the policy group that we  
20 need to move the process along as quickly as possible, the  
21 CALFED process. We certainly agree with that.

22 We also recognize that the magnitude of the  
23 issues and the detail that the CALFED staff has to put  
24 together to make this happen and to get a set of documents  
25 out that will fill the bill and support what they

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1 MR. STRELOW: Roger Strelow. Walt, as a  
2 former regulator myself I can sympathize with the fine  
3 line you're trying to walk here and be realistic about how  
4 you can get to your main objective as soon as possible.

5 One question occurs to me, that because of  
6 the many levels and natures of the interactions between  
7 what the CALFED process and this group along with it are  
8 doing and your ongoing responsibilities, I'm just  
9 wondering is there anything, in your view, that this group  
10 or CALFED itself could productively or constructively do  
11 to make your task easier? I guess all of what I am  
12 particularly wondering about is whether there is any  
13 tendency, it would not be well-founded, in fact, but we  
14 note all the time that the public, many elements of the  
15 public, you know, still have perhaps a number of  
16 misconceptions or just plain uncertainties about what the  
17 CALFED process involves, and if there is any -- if there  
18 would be any tendency on the part of the parties that need  
19 to come to a conclusion in your process to think that  
20 because of the dependency of the CALFED work somehow gives  
21 them a reason or a basis for being less willing to come to  
22 terms we ought to be aware of that and try to do anything  
23 we can just in terms of the public clarification.

24 I don't know if any such things exists or  
25 might but if there is, I hope you will advise us either

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1 eventually proposed, again, I would just urge that that  
2 process continue because whatever the chance for success  
3 are, and I indicated that I don't -- I don't assume  
4 agreements are a sure thing but I think agreements are  
5 eventual and dealing with any unresolved issues and the  
6 CALFED effort to come up with a long-term solution are the  
7 only alternatives, really, to all of us being in court for  
8 a number of years, and if anybody looks forward to that  
9 solution it must be attorneys who have kids to put through  
10 college.

11 MR. MADIGAN: Thank you. I'm asking Lester  
12 to schedule this as an item for our next month and ask him  
13 to think about what we might say in this regard that might  
14 be some sort of a formal BDAC action. Just so you all  
15 know. Okay.

16 MS. McPEAK: Well, thank you very much for  
17 coming over on very short notice and sharing your insights  
18 with us. I pretty well demonstrated my ignorance earlier  
19 in the meeting about the uproar here and I just want to I  
20 think make some observations about why it becomes so  
21 critical in our deliberations.

22 It seems to me once again that a common-sense  
23 approach gets somewhat undermined by the fact that there  
24 are previous agreements made in a political context that  
25 are now being either delayed, set aside, ignored. It

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1 wasn't until I saw the letter that Gary submitted that I  
2 did understand we had two fundamental problems: One, that  
3 there had been a commitment in the Accord for Water Rights  
4 decision to be completed by the middle of '97. I'm sure  
5 back when that commitment was made we thought there would  
6 be a lot more progress made here and that it wouldn't have  
7 taken a long time or whatever it was needed to make the  
8 political deal come together.

9 And secondly, that we do have the interim  
10 standards that are going to expire at the end of '98. I  
11 always feel like in the effort that I bring to sort of a  
12 good-faith, common-sense approach of working these things  
13 out, I find new information that blindsides me about why  
14 is there growing distrust.

15 This is not, you know, some kind of  
16 admonition to the Board. It is rather just an observation  
17 that folks, look at these kinds of commitments that we  
18 have made in the past and say, well, now we are not living  
19 up to them and so it, too, bleeds over here as to whether  
20 or not there can be trust in this process, and I don't  
21 know that we can, you know, resolve it all but it sure  
22 seems to me that to Reclamation and DWR it's pretty simple  
23 that if they want this process to succeed, do something  
24 about December of '98.

25 So I don't know who's listening from those

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1 much water are we going to get through the system or  
2 through this, who is responsible for what assurances in  
3 the system that are, in fact, critical baseline  
4 information items that we need to fashion a common-sense  
5 solution.

6 So I would, you know, question the assertion  
7 that there is no relationship between the Water Rights  
8 issue and CALFED and it's just a critical piece of  
9 information that will facilitate our reaching some  
10 understanding on how we are going to move forward.

11 Then I guess that it's my understanding that  
12 if Reclamation and the Department do not deal with  
13 December '98, then in fact it is the Board's ultimate  
14 responsibility to figure out how the standards are going  
15 to be that there is no lapse or implementation of the '95  
16 plan; is that correct? And how -- it sound like we are --  
17 you are talking about just a couple of months delay but  
18 the letter sound like it's a longer delay and where --

19 MR. PETTIT: I think as far as the Board's  
20 ultimate responsibility to ensure the standards, I would  
21 concur with that and I didn't point out one thing that the  
22 Board will have to do before the end of the year anyhow  
23 and that is revisit the order which dealt with the joint  
24 use of the two points of diversion. Now that was a  
25 temporary order that expires this year. So at the end of

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1 two agencies but, you know, I would like to encourage you  
2 to suggest they do something about it because I do not  
3 want to be pulled off in another B-2 exercise where again  
4 that commitment didn't allow for common-sense  
5 deliberations here. This is really the game that we are  
6 supposed to be proceeding in, and we can't keep setting  
7 aside what seems to be some of the real hindrances. So  
8 that's -- that's what I see as a dynamic.

9 I have learned a lot more since I came into  
10 this meeting about why there was the concern between all  
11 of the parties. We keep -- we can't -- we have got enough  
12 distrust going on, and that may in the end cause this  
13 whole thing to blowup. I am not real sane about it coming  
14 together but this kind of a problem certainly doesn't add  
15 to the prospect of making it all work.

16 MR. PETTIT: I appreciate the comments  
17 because I think the project operators will recognize parts  
18 of it as a being something I've said within the last few  
19 weeks.

20 MS. NOTTHOFF: Sunne touched on some of those  
21 things. I don't -- I don't -- this almost feels like B-2  
22 all over again. It's just another area where there is  
23 immense controversy among the stakeholders that are  
24 committed to sitting down at this table, but also that  
25 there's essential information that whether through B-2 how

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1 this year the Board will have to have a proceeding to  
2 address that issue in any case.

3 MR. MADIGAN: Mr. Pettit, thank you very  
4 much. We have interfered with your day.

5 Tom.

6 MR. GRAFF: I just have a comment not so much  
7 to Walt but to Sunne and others who neither the Department  
8 nor the Bureau is represented right now here in the  
9 counsel but certainly the State and Federal contractors  
10 are represented and they would be presumed to have  
11 significant influence upon their, respectively the  
12 Department and the Bureau. I wonder whether they are  
13 comfortable with just an indefinite extension of their  
14 obligation when other water users are not obligated?

15 MR. MADIGAN: Would that be under the general  
16 question of a rhetorical heading at this moment because we  
17 are going to schedule this for --

18 MR. PETTIT: Can I offer one comment on that,  
19 Mr. Chairman?

20 MR. MADIGAN: Yes.

21 MR. PETTIT: And would I hesitate to again as  
22 a definite commitment for a number of reasons. Number  
23 one, I'm not sure how much longer is involved in meeting  
24 the date specified in the letter than would have been  
25 involved anyhow because we had pretty much a mission

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1 impossible to meet the December deadline, and we fully  
2 expected to have enough there that the Board could show  
3 that we have done everything possible to meet its  
4 commitment.

5 The second point is that I don't see this as  
6 an indefinite extension by any stretch of the imagination  
7 because in a few months we are either going to know  
8 whether these agreements are worth considering or we are  
9 going to know that they didn't work and we are back to the  
10 evidenciary process which we would renote and we would  
11 start the hearing. So what we would have lost would be  
12 the three or four months between the March date and  
13 whenever we would decide that we are back in a full  
14 evidenciary process.

15 Other than that, nothing would change, and  
16 our bottom-line conclusion was the chance of these  
17 agreements succeeding was worth that three or four months,  
18 whatever it is delay so.

19 MR. MADIGAN: Hap.

20 MR. DUNNING: As the Board puts off  
21 completing the Water Rights Board in '99, are you  
22 preparing to try ag review on the 1995 Water Quality  
23 Standards with the possibility that those standards will  
24 be revised and do you have a different apportionment  
25 problem?

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1 have been two very pronounced issues come up that revolve  
2 over the last several months, maybe brewing for longer  
3 than that, and when you're putting together these packages  
4 of tools, the question has been what's the proper balance  
5 of tools, and specifically well, there is a lot of  
6 nuances, there is the specific issue of transfers and  
7 there is a lot of ways that could define this list further  
8 but there has been two big ones and that is the proper  
9 roll of storage and the proper roll of demand management.  
10 So we wanted to -- since they are so significant and  
11 deserve a lot of public discussion, we wanted to be sure  
12 that we have some public discussion today so that we can  
13 make sure that we are addressing these issues and drawing  
14 attention to the strengths and weaknesses and concerns  
15 associated with these issues when we roll something out to  
16 the public.

17 What we want to kind of do is pick off the  
18 storage issue first and kind of lay out some of the issues  
19 of consideration there, and then get into a very specific  
20 component of demand management.

21 Essentially let me start with storage as a  
22 tool. Why do we even consider storage; and in this broad  
23 context this applies to both surface as well as  
24 conjunctive management. I mean there is the broad issue  
25 of increasing operational flexibility. It's kind of like

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1 MR. PETTIT: That is always a possibility,  
2 and I think you're aware, Professor Dunning, that as  
3 settlement for litigation with the San Joaquin interest.  
4 We agreed that if they insisted we would reopen the  
5 Vernalis. Okay. So again, this agreement has the  
6 potential for solving what could be a huge problem because  
7 our obligation is to reopen the reanalysis standard if  
8 they so elect, and that would not be a pretty proceeding.

9 MR. MADIGAN: Okay. Let's go ahead and wrap  
10 it up. We have lots to do today. Again, Walt, thank you  
11 very much for taking your time today. I appreciate you're  
12 being here.

13 Lester, we will put this on the agenda for  
14 next month and we will revisit it then.

15 Thank you, sir.

16 MR. PETTIT: Thank you, Mr. Chairman and  
17 members. Thank you.

18 MR. MADIGAN: Mr. Snow, you're on.

19 MR. SNOW: We try to break these issues up so  
20 that we have absolutely no continuity on the agenda. Is  
21 the stragaty working? Okay. Thank you.

22 I want to make -- just flash this up for a  
23 moment and I think there has been a lot of discussion, a  
24 lot of support about, you know, a diverse strategy and try  
25 to deal with the water management issues. There currently

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1 the bank account versus cash flow, that type of issue  
2 which in theory allows you to do this second bullet which  
3 in theory allows you to do the second bullet, which is the  
4 point we made with our earlier presentation.

5 Obviously it's a tool to deal with this issue  
6 dealing were a mismatch which isn't just mismatch, it's a  
7 time and type issue. It's something that actually got  
8 pushed more fully into our discussions last year after the  
9 flooding was if your doing storage or if you are looking  
10 at storage is there a way to integrate food controls into  
11 it and so that is really quickly the kind of reason why  
12 you look at storage as a tool.

13 Some of the -- kind of furthering on that,  
14 the idea of storage turning low-value water in high-value  
15 water, the issue of attenuating flood flows, there's other  
16 ways to do this also. This is classic watershed  
17 management. If you have a healthy watershed, you are  
18 going to tend to intenuate the flood flows and have a more  
19 natural hydrograph.

20 Try to shift the diversions again reflecting  
21 on the issue of life cycle of certain fishes so that  
22 you're shifting your diversion patterns to reduce  
23 entrainment and then matching it up through storage to  
24 meet your demand. Again kind of a reiteration of what was  
25 on the first slide in terms of trying to match up the

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1 environmental value.

2 Also there is ways that you can manage  
3 storage to improve water quality related to some of the  
4 natural run-off, not point source run-off that you deal  
5 with in the system.

6 Let me kind of get into a more specific issue  
7 and state the question, then maybe even in an inflammatory  
8 way this is something that has come up. If you recall our  
9 presentation at the last meeting we showed three hybrid  
10 alternatives, all that had storage in them, both surface  
11 storage and conjunctive management. So one simple way to  
12 look at that is that at a minimum even those in this room  
13 that are not crazy about surface storage, I mean there's  
14 the issue of ground water conjunctive water management and  
15 all of the alternatives, but let me start at the bottom on  
16 this one.

17 Even what we did, even the group that worked  
18 on this did not intend that what we would put in there for  
19 discussion was a target. It was not the intent that when  
20 we say 4.7 million as an alternative that that is an  
21 absolute target. You can look at it for the planning  
22 purposes as a kind of umbrella to make things work and  
23 then you have to work through a lot of other issues, and  
24 I'll try to hit some of them. But the reason that we kind  
25 of did that is we found some issues where you did not have

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1 a good substitute for storage for managing the system,  
2 some things line up where you've got a clear replacement  
3 you're trying to accomplish, A, the storage and you can do  
4 that with a transfer or you can do that with some other  
5 type of activity.

6 So there is, you know, some of those kinds of  
7 issues in terms of major changes in diversion patterns  
8 which you are trying to avoid significant impact on users,  
9 and without modifying the local storage that's there for  
10 other reasons, and I think that's all we are trying to  
11 capture in these two points is that there is, you know, a  
12 lot of tradeoffs trying to balance that package and see  
13 how effectively you're dealing with a lot of different  
14 issues.

15 Maybe I should draw attention to this one,  
16 though. This one has come up in kind of an odd fashion.  
17 I've mentioned conjunctive management and we have seen  
18 people that are interested in talking about conjunctive  
19 management but they are nervous that conjunctive  
20 management turns into ground water mining unless there is  
21 a specific assurance that there is water someplace to  
22 replace that ground water, that the best intention of a  
23 conjunctive management program if you don't have it set up  
24 to make sure that you're refilling the basin, ends up  
25 being ground water mining that is how that sometimes comes

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1 up as an assurance issue.

2 Let me talk kind of quickly about the --  
3 MR. MADIGAN: Hang on a second.

4 MR. DUNNING: Before you leave that overhead  
5 I have a very quickly at the end of the second bullet  
6 there, the last notation is large scale land and fowling  
7 is not an acceptable option. That seems a flush to fly in  
8 the face of the memo that you have distributed.

9 MR. SNOW: I kind of doubt that it does.

10 MR. DUNNING: And unless it's in a 500,000, a  
11 large scale --

12 MR. SNOW: The 500,000 is not large scale?

13 MR. DUNNING: Well, is what you're assuming  
14 to reconcile those two?

15 MR. SNOW: Maybe for sake of the discussion  
16 I'll say, yes, that's what I'm saying is that 500,000  
17 acres of ag land retirement is not an acceptable measure,  
18 and that's the next item we want to discuss.

19 MR. DUNNING: It's not an acceptable measure  
20 but aren't we going to discuss --

21 MR. SNOW: It is next on the agenda.

22 MR. DUNNING: It seems an inconsistent  
23 statement.

24 MS. NOTTHOFF: That struck me, too, because  
25 first it says the impacts are unclear and then it says

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1 it's not acceptable. So how do we go from unclear impacts  
2 to unacceptable? It seems like that is worth more  
3 discussion than the bullet.

4 MR. SNOW: As intended, yes.

5 MR. DUNNING: Is this part of the "don't be  
6 consistent agenda approach"?

7 MR. SNOW: Well, no, I don't think so. I  
8 mean maybe I should make one thing really clear about the  
9 next agenda item and I think the way that we put that out  
10 was not unclear. We are not proposing that CALFED change  
11 its position which is land retirement is not or water use  
12 efficiency measure and is not currently any part of any  
13 lower alternatives we have put out some analysis because  
14 we have been required, requested to buy a lot of people  
15 that we haven't analyzed that. So we have attempted to  
16 put together a piece of kind of put a framework around,  
17 you know, what goes on when you try to do that, but it's  
18 not part of our current program, and so this is consistent  
19 where we are at this point.

20 I probably don't need to spend a lot of time  
21 with this but all storage is not created equal. If you  
22 can -- if you recall we talked a long time ago about the  
23 different aspects of storage in different locations, and  
24 so we talked about upstream storage. Okay. I give.

25 Generally we talked about storage up in this

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1 region there ends up being three basic approaches,  
2 offstream storage best example of that. We talked about a  
3 lot, like I say, a sites reservoir located in this region.  
4 You have onstream storage. We have talked about no new  
5 onstream storage that we had on the table the concept of  
6 existing reservoirs. So the business example of that, the  
7 only one that is actually being discussed by anyone is the  
8 raising of the Shasta and then ground water storage which  
9 is conjunctive management operations in various locations.

10  
11 A general onstream storage, obviously easy to  
12 fill and empty. You increase stream flows. You can deal  
13 with dryer flows probably has a little more opportunity  
14 for flood control and temperature and hydropower. So  
15 those might end up being three distinguishing  
16 characteristics when added to this.

17 Offstream, obviously you're limited by what  
18 you construct for inflow and outflow capacity. You can by  
19 exchange increase instream flows, dryer flows much more  
20 limited on flood control, much more limited on temperature  
21 control.

22 The other thing, though, with offstream, the  
23 reason that we've discussed it the way that we have is  
24 particularly in this situation you have the opportunity  
25 from an offstream reservoir to provide water for lack of a

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1 better term through the back sides of some of the  
2 irrigation districts thereby having them reduce their  
3 direct diversions off the Sacramento River, thereby  
4 reducing fish entrainment issues.

5 Ground water kind of similar to offstream,  
6 probably further limited in terms of your input/output,  
7 rates but also what you pick up with ground water is a lot  
8 more complicated interactions with local users, and who is  
9 the beneficiary and who has been impacted? So it ends up  
10 being a lot more complicated.

11 MR. HALL: You make a point about limited  
12 input/output capacity there for lower flood whole  
13 benefits. That is true in and of itself, however you can  
14 build offstream storage to replace water that you would  
15 otherwise lose from onstream storage and then reoperate  
16 the onstream reservoirs and essentially gain acre foot per  
17 acre foot that much ordinary -- that much flood control  
18 capacity, could you not?

19 MR. SNOW: Well, we have before cautioned  
20 until you do a lot of details modeling that to assume an  
21 acre foot per acre foot benefit on flood control is  
22 probably overly optimistic in terms of the complexity of  
23 the operations between the two reservoirs.

24 MR. HALL: Granted, but there clearly is some  
25 benefits that could be derived from that sort of

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1 integrated operation; right?

2 MR. SNOW: Yes, and the point -- we had  
3 discussed this before but the issue that Steve is raising  
4 here is if you have offstream you have already set up  
5 ahead of time your operating parameters. In theory you  
6 can move water out of the onstream reservoir ahead of time  
7 into offstream to protect your water supply thereby having  
8 a larger flood capacity on reservation the the onstream  
9 reservoir, so that's how an offstream facility can, in  
10 fact, provide you flood control benefit. It's complicated  
11 from an operational standpoint, and as I responded to  
12 Steve, it's probably not a one-for-one type of  
13 relationship.

14 We talked about I think our normaclature has  
15 been south of Delta storage. It's really storage in the  
16 export area, generally down in this region. A little  
17 different characterization of aqueduct type of storage, I  
18 think, the two examples so that you have these in mind.

19 While we talked about the Delta I think it's  
20 best if you want to talk about Los Banos or Grandes as  
21 examples of off-aqueduct storage, those function a little  
22 bit differently because it obviously can have its own  
23 separate intake as well as being tied to the system. You  
24 can use the hydrograph we talked about earlier to actually  
25 increase exports or provide additional water supplies, but

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1 also the issue with additional storage you can curtail  
2 pumping during these critical periods. It's tied in to  
3 some of the San Joaquin wetlands issue but that kind of  
4 manifestation of having more water in the system.

5 Again some thought by managing the reservoir  
6 you can manage the San Joaquin water flows better which is  
7 also related to the water quality issue. This gets to  
8 another issue, a distinguishing characteristic that was  
9 kind of risky to facilities. This is an interesting  
10 trade-off because you certainly have heard beam argue that  
11 because of the risk in the Delta you probably need to have  
12 an facility such as an isolate facility to provide greater  
13 certainty in terms of potential outage, well, you can do  
14 some of that also through reservoirs. So that why those  
15 issues are potential alternatives that you can look at.  
16 This is one that -- I guess I can kind of call this a  
17 limitation because of the sense activities in the Delta,  
18 how much you can put into a storage south of the Delta is  
19 kinds of limited by how you operated the system. Again,  
20 if you had something closer to the Delta system you may  
21 have some other variability.

22 Now, I am not trying to sell anybody on  
23 anything on this stuff, but try to lay out what the  
24 functions are that we need to talk about and make sure we  
25 are highlighting when we go out to the public.

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1 Similarly from the Sacramento Valley and the  
2 San Joaquin you have a number of opportunities for ground  
3 water storage. Again it functions very similar to off  
4 aqueduct in that you may be looking at the canal system to  
5 provide water to the conjunctive water management  
6 operation but that you have other systems in the east side  
7 of the valley, but some of the same problems, maybe not as  
8 complex as in the Sacramento Valley but you still have  
9 kinds of the local users ground water users problem that  
10 tend to make it kind of complex. One of the --

11 MR. GRAFF: Just a comment. Do you include  
12 ground water aqueduct ground water storage in that.

13 MR. SNOW: No. We assume this to be full.  
14 Now we are including these ground water basins in the  
15 opportunity to do this. I mean it has been highlighted,  
16 in fact, again very recently that there is some unused  
17 ground water capacity in Southern California that you  
18 could do some of this stuff with still. So I mean that is  
19 a good point. I should back up and say that maybe by the  
20 way that we have talked about this it looks like we are  
21 always talking about the San Joaquin ground water basins  
22 and Sacramento ground water basins but also Southern  
23 California ground water basins fit this model also.

24 Kind of a key, those are kind of the -- hose  
25 are kind of the key issue and maybe we can kind of

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1 water efficiency, and in fact the programs are being  
2 implemented as they were intended to be implemented. So  
3 those types of opportunities to tie these pieces together  
4 more tightly so that you are not in a situation where all  
5 of a sudden you're building a lot of storage and none of  
6 the other things that you wanted to have happen are  
7 happening.

8 Those are difficult issues that we need to  
9 play out, but these are some of the things that we are  
10 going to try to lay out to the public and, you know,  
11 what's good, what's bad, what are some of the issues that  
12 have to be resolved as we move forward. So at this point  
13 I would be glad to entertain any questions regarding  
14 storage.

15 MS. McPEAK: Well, Lester, I was just going  
16 to say that it does appear that you have had an epiphany.  
17 You probably had it a lot earlier than the last week or  
18 so, but I am making that comment about the linkages that  
19 you are talking about. There's been a great fear that  
20 more storage allows inefficient use, and I hope that you  
21 too will develop this the linkage. It's likely to be a  
22 part of an assurance package. It's clearly I think a way  
23 to make a lot of the forces reconcile their concerns and  
24 distrust here but also to make the pieces of the  
25 comprehensive solution come together.

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1 generate the discussion with some of this. It does not  
2 show up quite as well but when you look at us having  
3 blocked out the chunk of storage that makes some people  
4 nervous and other people excited and hence the debate is  
5 joined, there is an issue of phasing and linking of  
6 storage options, and that is that if you think storage is  
7 a tool that can do things for you, then how do you decide  
8 how much you move forward with and what other things have  
9 to have occurred before you get into storage. So you may  
10 have the ability to develop some initial storage for  
11 objectives which you agree you can't really meet well  
12 through some other type of action.

13 Then you can also set up what I kind of  
14 shorthand put here is your link of storage issue to  
15 developing to key financing principle, user pays. That if  
16 you are going to have a storage reservoir that benefits  
17 specific users, then you have a principle that before any  
18 storage is built you have got all of that user-pay stuff  
19 put in place.

20 Something that is more interesting and also  
21 much more complex is the issue of, you know, those other  
22 tools that provide some of these similar benefits.  
23 Perhaps you link storage to some performance with respect  
24 to transfers and some type of marker that there is a more  
25 effective transfer marked and also to performance use and

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1 I mean it seems pretty much common sense and  
2 obvious to me that, you know, if you want more water  
3 supply then you had better be using the existing water  
4 supply that you have as efficiently as possible. Just out  
5 of the box that's the kind of water ethics that would be  
6 expected and would be embedded in a water rights  
7 proceeding, all of those kinds of things, but that as soon  
8 as it's not been a given or people haven't thought that  
9 that is what is given in our dialogue, you're finally  
10 making it explicit here.

11 MR. SNOW: Maybe I should indicate before I  
12 am asked, we didn't at the last minute erase something  
13 here.

14 MS. McPEAK: Yeah, you did.

15 MR. SNOW: I lost the overhead and had to  
16 recreate this at home and had to. I couldn't get rid of  
17 that. That dot appeared there and I couldn't get rid of  
18 it. I tried to delete it.

19 MS. McPEAK: It's kind of a cut. You have to  
20 put the curser there.

21 MR. MADIGAN: And with that fairly feeble  
22 explanation, we move on.  
23 Richard.

24 MR. ISMARIAN: One thing I didn't see on your  
25 presentation on the surface storage was the acceptability

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1 of the reservoir sites from an environmental social  
2 redirected and tax point of view. Are you comfortable  
3 with that.

4 MR. SNOW: Comfortable that we are there and  
5 we know that we have six sites that are perfectly  
6 acceptable, no, and that is a whole other process that we  
7 are starting, and I'll make mention of it later.

8 One of the critical things that we are on  
9 path to do is what is called a 404 analysis which is 404,  
10 the Clean Water Act. If you are going to do a reservoir,  
11 generally you need a 404 permit. There are exceptions.  
12 The most notably Eastside Reservoir in Southern California  
13 I think did without a 404 permit, however that is a very  
14 detailed screening process on environmental, social, all  
15 kinds of issues that have to be dealt with. We are on  
16 track to do that.

17 Our most desirable situation would be that  
18 if we get to a final on our EIR/EIS, we'll have advanced  
19 the 404 to a point that we have a short list of reservoirs  
20 so it's a lot clearer what is on the table and what is not  
21 on the table.

22 MR. MADIGAN: Bob Raab on environment.

23 MR. RAAB: Lester, it's not clear to me what  
24 the linkage is between storage reservoirs and the  
25 Peripheral Canal. Say a North Delta storage facility and

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1 have greater certainty of its use than San Joaquin Valley  
2 storage would be, and the issue of how you decide which  
3 would go first and that is kind of a staging issue. I  
4 mean if we determine that storage works are programatic,  
5 if we started lying out, if you play off the staging  
6 example, which reservoir provides the most benefit, has  
7 the least impact, and I think that there is probably still  
8 an open debate.

9 I would just indicate a personal opinion: It  
10 appears to me that having some Sacramento Valley storage  
11 provides you with a lot of benefits, fisheries benefit and  
12 other kinds of benefits that you don't necessarily get in  
13 the San Joaquin Valley storage, but I know that there is  
14 other opinions about that.

15 MR. MADIGAN. Yeah. Two points just to add  
16 on what Lester is saying, that storage is adding on to  
17 supply or all perils of the environment and conductive use  
18 the next is facility, and it really doesn't provide new  
19 water for either of those. It gives waters flexibility  
20 but it's a great ecology and fisheries issues.

21 The other is on Sunne's point about the --  
22 since March of '97 the CALFED program has explicitly had  
23 in it as linkage of benefits from the CALFED program  
24 transfers and water from the State Waterbank to completion  
25 of water use efficiency requirements certified programs

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1 a South Delta storage facility inextricably link together,  
2 say at a late phase but sooner or later you are going to  
3 have to have a Peripheral Canal.

4 And also aside from the canal is in the final  
5 phase are you envisioning having two storage facilities or  
6 settling for one?

7 MR. SNOW: Okay. Let me start with the first  
8 one one. To a significant degree, and we can get into all  
9 of the exceptions, but to a significant degree the issue  
10 of storage is not directly coupled with your Delta  
11 conveyance decision, and I think we talked about that at  
12 our last meeting where you're showing if you want to use  
13 water supply as an indicator, we show that you can hit  
14 roughly the same water supply increase with a  
15 through-Delta system as you can with one that would --  
16 with a dual system, and so storage provides certain  
17 functions. You have certainly levels of uncertainty about  
18 what you are going to end up operating requirements but  
19 you can kind of hit the same target without having to do  
20 it to a Delta facility.

21 Is that responsive to your first question?  
22 You don't have to have an isolated facility to justify  
23 storage. Now, the one minor exception that could be is  
24 that in that case you might find that your Sacramento  
25 Valley storage is much more valuable to you because you

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1 for EMP's, and it's not really an epiphany. A lot of us  
2 have been working on the details. It's been there for a  
3 long time and the concept is pretty well embedded in the  
4 program.

5 MR. MADIGAN: Anybody else? All right.  
6 Lester.

7 MR. SNOW: Okay. Let me wade into the other  
8 issue, and it's broadly demand management issue. Let me  
9 go back to this for a minute. This is what we are saying  
10 is the effect of our, you know, Water Use Efficiency  
11 Program, and then also I mentioned transfer induced. I  
12 mean there's a lot of conservation that we see as being  
13 economically induced because you have a transfer market,  
14 but this is based on how we are approaching water use  
15 efficiency which does not include any type of land  
16 retirement as a water use efficiency measure.

17 We defined that away. That isn't water use  
18 efficiency but the issue has been raised, you know,  
19 shouldn't you be looking at this? And as you know we have  
20 received a lot of comments and a lot of concerns about  
21 that, and so we have attempted to at least put a marker  
22 out there. Let me kind of explain why we did what we did,  
23 and I think we have already gotten a lot of feedback but  
24 we may not have performed the best analysis ever done on  
25 this subject and I think that later I'm going to make a

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1 plea to get input from people.

2 We have already contacted the California  
3 Institute for Rural Studies I believe at U.C. Davis to try  
4 to help us think through some of these issues. But again,  
5 to start off we don't have it in our alternatives and we  
6 are not proposing that we change that. We are trying to  
7 be responsive to issues that have come up, and the two  
8 issues as we see them is we just had a lot of stakeholders  
9 say you have to look at this type of land retirement, land  
10 management, but also this is kind of a different issue on  
11 a different track. When you're doing 404(b)(1)  
12 compliance, the Clean Water Act, we have to make sure that  
13 we look at any type of alternative to doing a facility,  
14 and that means to us that we have to show what the impacts  
15 and what the issues are associated with forcibly reducing,  
16 and demand might be the way to look at it even no through  
17 voluntary actions.

18 This is real important, though, and in this  
19 paper that we put in your packet we made no effort to  
20 address a lot of very fundamental policy issues like rural  
21 community impacts and social issues. We did kind of a  
22 very simple economic model that was put EMCIA. We put the  
23 numbers in and that is what was reported here. So there  
24 is a lot of other issues that need to be addressed or  
25 discussed.

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1 action, not as the direct intent of the actions, and I'll  
2 actually mention a broader issue of impact on ag land  
3 later today. So we need to continue to refine the  
4 analysis.

5 I am just going to probably hit just one more  
6 issue in terms what have is in your packet. We took the  
7 issue of 500,000 acres of ag land. I think we actually  
8 picked that up out of a comment letter to go ahead and  
9 play with that number. What we ended up with, the way  
10 that the model works is you have an average year of about  
11 1.4 million acre feet. What is real important about this  
12 is average year savings does not translate to drought  
13 savings. It is significantly different in a drought. You  
14 are not saving anywhere near that amount in a drought  
15 year. So that is important.

16 Getting back to Dick's hydrograph, you might  
17 look at this and say would you 1.4 million acre feet in a  
18 drought. Well, you don't have that much.

19 MR. DUNNING: Lester, in that number are you  
20 assuming that for every acre that you retire, whatever  
21 water that is now being used by that acreage would  
22 therefore be directly attributable to a reduction in  
23 demand? In other words, is the 1.4 directly tied to the  
24 \$500,000 acres; is that what that 500,000 is now using?

25 MR. SNOW: No. It's diverting quite a bit

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1 I probably don't want to get into the details  
2 of our analysis unless you want me to, and then I'll  
3 probably ask somebody else to discuss it. I guess what we  
4 want to use this as kind of a marker. I mean we have  
5 people saying, "Why don't you look at land requirement  
6 instead of 'X', 'Y' and 'Z', instead of reservoir, instead  
7 of some other type of activity." So we that we need to  
8 have something so that we can all talk about as kind of a  
9 description of what that is and what the impacts might be  
10 and how much it might cost. So we do need a stakeholder  
11 input on this, some suggestions of how we might analyze it  
12 or what we might do in terms of assumption.

13 Again, as I mentioned, we are trying to  
14 contact what could be considered neutral parties to make  
15 sure that we kind of get this right as we move forward,  
16 but also I think that where we were in Phase I is that  
17 this basic approach of just going to one user and saying  
18 we are going to buy you down doesn't really meet our  
19 solution principle. I mean that is an issue that we  
20 talked about probably over a year ago.

21 Again, I have to put another caveat in here  
22 for people who may have not been following us. That is  
23 different than us saying that you may use lands retirement  
24 to deal with water quality issues, but there can be action  
25 that result in land retirement but as a consequence of the

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1 more than that. The 500,000 acres is actually diverting  
2 out of the system more than that so there is more than  
3 that.

4 MR. HALL: Consumptively using that,  
5 consumptively using that many?

6 MR. SNOW: Yes, that is consumption and  
7 consumptive use.

8 MR. HALL: Okay. Thank you.

9 MR. SNOW: I guess I just -- the way the  
10 model works, that ends up being your capital costs plus  
11 you have O and M, and you can't have 500,000 acres of  
12 vacant land out there just blowing around. You have O and  
13 M costs. This is an issue that I think there is a lot of  
14 speculation about that, what the range might be, and that  
15 kind of happens up. Again there is no incorporation of  
16 what I would call the broader rule community of social  
17 impacts. This kind of was for us to get a marker on the  
18 table to sort of start working with so that we could sort  
19 of started working through this issue.

20 MR. MADIGAN: Hap.

21 MR. DUNNING: Well, I am certainly pleased  
22 that staff began on this, and I would encourage staff to  
23 continue and to develop this and to look at this more  
24 fully and look at the broader impacts as much more  
25 important.

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1 I wonder, Lester, if the real choice in the  
2 future is between some kind of orderly, systematic  
3 compensated land retirement program and a disorderly  
4 un-systematic program if we have a severely over-taxed  
5 system and we face continuing and perhaps widening gaps  
6 between the demand for export water and the supply of  
7 export water. Isn't land retirement simply going to be a  
8 reality whether we plan for it or not?

9 MR. SNOW: Well, I guess there is a lot of  
10 responses to that. I mean this type of action as a matter  
11 of public policy has a lot of meaty issues associated with  
12 it, and I guess where we are, where I thought CALFED was,  
13 including BDAC, in terms of our Phase I findings was that  
14 there are other approaches to dealing with the problems  
15 and in fact for some of the problems we are dealing with  
16 this is fairly infective. And let me highlight an  
17 example. Maybe you are going to want to see more on this  
18 once I have done this and you have spent 2.3 billion  
19 dollars, which by the way we have a lot of people arguing  
20 that we have under-estimated this significantly, you have  
21 incurred a lot of social impacts associated with it, and  
22 say the San Joaquin Valley -- well, not say the San  
23 Joaquin Valley, that is where this is is the San Joaquin  
24 Valley.

25 You still have all of the fish entrainment

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1 actually aren't a result of concerns about those farmers,  
2 and I want to outline why I think that this proposal, and  
3 first of all the analysis, I want to outline very briefly  
4 why I think it very much over-estimates benefits and  
5 under-estimates costs.

6 And really, secondly, the overall goal that I  
7 think we all have and that certainly our organization has  
8 a goal to make agriculture in the State more  
9 environmentally -- have more environmental benefits, and  
10 also we are concerned about the economic issues with  
11 communities on the west side and agriculture and this can  
12 benefit those communities a great deal.

13 That is sort of an overview of where we are  
14 going in our work. Let me get to some specifics about  
15 this analysis and why I think that it under-estimates the  
16 cost.

17 First of all, the analysis says that there  
18 would be 22,000 jobs lost as a result of this land  
19 retirement but that there would be 15,000 jobs created. I  
20 fail to see how those jobs would be created. I think that  
21 was spit out of a computer model that wasn't in any way  
22 realistic about the land owners who would basically have  
23 their land purchased by government agencies, many of whom  
24 do not live on the west side. The record shows if you  
25 look at the west sides that those landowners have not

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1 problems in the Delta. You have made some impact on them  
2 but you still have some fish entrainment problems, you  
3 still have water quality problems, you still have problems  
4 that you have to address and you have directed all of your  
5 impacts to a specific area and a specific user group. So  
6 I mean that is -- that is kind of the management or  
7 business issue here is that you take a relatively  
8 expensive action that has a lot of impacts associated with  
9 it and you only partially address the problems that you  
10 are trying to solve so you still have to go spend a lot  
11 more money on other things, and I think where we were on a  
12 much broader context earlier in Phase I was to say this  
13 type of direction of impacts really doesn't fit the  
14 solution principle.

15 MR. MADIGAN: I know. Judith was next.

16 MS. REDMOND: Yeah. I am glad that you  
17 decided to put this on the agenda. I think it's probably  
18 a good thing for us to talk about. My organization of the  
19 community relies of family of farmers is pretty concerned  
20 about the whole issue of land retirement, and I wanted to  
21 say right up front that we are a membership organization.  
22 Probably 60 percent of our organization are farmers.

23 But most of those farmer members aren't on  
24 the west side so it's not the west side of the valley.  
25 They are in other areas of California, so our concerns

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1 invested well in the economic well-being of those  
2 communities and there is really no reason to believe that  
3 they would, even if they sold their land, that they would  
4 reinvest in those communities is really very, very  
5 unlikely, and so the idea that 15,000 jobs would be  
6 created by those landowners by re-investing in those  
7 communities is just a real, real long shot. I think this  
8 computer model was, you know, not being realistic about  
9 what would happen.

10 Secondly, I don't think that the estimates of  
11 the amount of water that would be gained are accurate. I  
12 think first of all, it's very, very difficult to predict  
13 what crops would go out as a result of land retirement  
14 program, and there is a lot of evidence that shows that  
15 those decisions are made by individual farmers and just  
16 about the only way to predict which crops would go out of  
17 production is to interview the farmers. It's all -- it's  
18 very difficult to predict and the reason or the evidence  
19 that I am looking at is evidence that in the drought  
20 basically people said, you know, alfalfa would go out, and  
21 that isn't what happened.

22 So I think the other point in terms of how  
23 much water would be gained from a land retirement program  
24 is that these estimates are based on normal years and they  
25 are not based on what would happen if CVPIA was

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1 implemented, so they are very optimistic estimates of how  
2 much water would be gained. In a critical or a dry year a  
3 small fraction of that water would be gained and these  
4 are -- much of this land might be low-priority delivery  
5 lands, land that would not even get deliveries in critical  
6 or dry years, especially after CVPIA implementation. So I  
7 don't think that the amount of water gained in the  
8 estimates in this model are accurate.

9 Third, I think that the costs is not  
10 accurate. The cost projections here don't include -- I  
11 think there is going to be much greater impacts on land,  
12 on property tax because that lands will all be in  
13 government hands. I think that Social Services costs for  
14 many counties and for the State will increase dramatically  
15 because of the unemployment in these areas, and I think  
16 that it's very unrealistic for us to imagine that land  
17 retirement on this level could be done in any responsible  
18 way without a very significant mitigation program to help  
19 transition the communities on the west side.

20 There is precedence for that kind of  
21 mitigation when we change public policy about as far as  
22 harvest practices. We provide the mitigation. Those are  
23 costs that have to be figured in and there has to be  
24 transitional relief for those communities on the west side  
25 because it's very clear that the landowners after they

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1 communities disintegration if we look at a land retirement  
2 program on this scale, and I think very few benefits, much  
3 smaller benefits than you might imagine if you just don't,  
4 you know, haven't visited those communities.

5 So overall I think that we do need to move  
6 agriculture on the west side in the direction of greater  
7 environmental benefits. I think that we can do that and I  
8 think that we need to figure out solutions that would work  
9 over the long-term for a larger community, and I think  
10 that this proposal really has come out of some very, very  
11 narrowly-focused interest groups, and that it will not  
12 provide the most benefit for the least impacts that we  
13 have to be looking for.

14 MS. SABLAN: Do you have a list?

15 MR. MADIGAN: Yes, I do, I have a long list.  
16 Marsha.

17 MS. SABLAN: I would like to thank the folks  
18 for this analysis. It helped me reading it and also to  
19 thank Judith for her work. I would also like to add my  
20 personal experience on this as living for fifteen years in  
21 a west side community.

22 At the start of this I also believed that  
23 land retirement would probably be part of our program. I  
24 envisioned it like Judith had mentioned, as the local  
25 farmers and also the water districts handling that,

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1 have sort of been bailed out and taken care of aren't  
2 going to provide any mitigation in their communities.

3 And then the most important thing that I think we  
4 should -- we come back to over and over again is that  
5 the -- there is cumulative impacts. The land proposed for  
6 retirement and analyzed here would be for demand  
7 management. In addition, that is the ecosystem  
8 restoration land retirement. It's up to 115,000 acres.  
9 Maybe -- it's maybe somewhere around there where it's not  
10 actually land retirement, I know, but it's a change in the  
11 youth of the land. There Water Quality Program includes  
12 land retirement.

13 CVPIA when its implemented could include a  
14 tremendous amount of land retirement and these regions  
15 that are analyzed in this area, I think we are talking --  
16 if you do the math we are talking 17 to 20 percent of the  
17 land in these areas. We are looking at retiring that  
18 land, taking it permanently out of agriculture.

19 If you think about what is going to happen in  
20 these communities it's not just going to be that land,  
21 it's going to a lot of farms nearby, the agriculture  
22 supported businesses, it's going to be the schools, there  
23 is going to be no tax basis to continue to support the few  
24 schools that are there for the people that live in these  
25 communities. So I think we are talking about massive

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1 putting it -- improving water quality by that. I had  
2 never envisioned it as a half million acres of land being  
3 put out of retirement.

4 Our town of Firebaugh sits right on the  
5 San Joaquin River Valley and has a hundred and forty years  
6 of history as an agricultural town. It was the Miller and  
7 Muck's headquarters back in the 1850's. That town is now  
8 probably still 90 percent dependent on agriculture for its  
9 services, for its taxes, really for everything. As Judith  
10 went through, the schools, Social Services, the farm  
11 implement sales provide our services there in the town.

12 The things that we have done in the town to  
13 try to mitigate some of the problems that everybody can  
14 see is coming from that area, we have two tomato paste  
15 plants that opened up within the last five years trying to  
16 diversify the work force, the work base, extend the work  
17 time.

18 We also have looked at the ecology of the  
19 San Joaquin River. We are right in the midst of three  
20 programs right now, one with the Water Conservation Board  
21 to rehabilitate the San Joaquin River through that area to  
22 mark the trails and also to clean the river in that area.  
23 There is about a million dollars being spent in that area  
24 right in the Firebaugh area right now to improve ecology.  
25 So I think that we are moving on the right path, but I

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1 can't imagine Firebaugh with losing 5,000 jobs. There's  
2 only 5,000 people that live there. That is approximately  
3 half of the work force that they have that will be lost.  
4 I could see Firebaugh and the rest of the towns in that  
5 area being ghettos, ghettos of unemployed people depending  
6 on welfare and the State and Federal benefits.

7 MR. HALL: Well, I like others I find serious  
8 problems with the analysis. The numbers don't match with  
9 any other study that I have seen. I agree that the  
10 benefits are overstated, the costs are understated for a  
11 variety of reasons, but I recognize that someone somewhere  
12 has to check off a box in a 404 permit that this has been  
13 analyzed. I would suggest that the analysis not be  
14 modified but redone because it is, in my opinion, not only  
15 were the wrong numbers used but the methodology was wrong.  
16 This probably came out of a computer model as Judith  
17 Redmond suggests with a number of erroneous assumptions.

18 But beyond the flaws in the analysis there  
19 are some thresholds issues here. This clearly violates at  
20 least one solution principle that there would be no  
21 significant redirected impacts and violates that solution  
22 principle. That ought to be clearly stated and should be  
23 part of any analysis that is done, not just stated  
24 somewhere else but part of the analysis. And it also  
25 ought to go at least a part of the way toward debunking a

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1 couple of myths. One is that somehow retiring land will  
2 solve the problem that CALFED was commissioned to solve.  
3 It does little or nothing to solve entrainment problems.  
4 It does little or nothing to solve water quality problems  
5 for urban areas. It doesn't meet those tests. It also  
6 fails the solution principle test.

7 And I guess the other myth that I think we  
8 need to debunk is that somehow we have to reduce demand in  
9 order to balance the scale. That has never been what  
10 CALFED is about. The idea, the premise of CALFED is that  
11 you can sustain and even increase exports and at the same  
12 time improve the environment. I disagree. We do not have  
13 to retire land in order to make the Delta healthy and keep  
14 it healthy. The premise of that is that is the premise of  
15 CALFED, and frankly the preponderance of the evidence that  
16 CALFED has produced supports that premise.

17 MR. MADIGAN: David.

18 MR. GUY: Yeah. Lester, like everyone else,  
19 I think I appreciate the fact that you have a legal  
20 obligation to look at this issue. I guess I find it very  
21 frustrating that an issue that we disposed of at the end  
22 of Phase I keeps taking so much of our time and the  
23 temptation is like, you know, I think Judith eloquently  
24 and Martha eloquently described some of the pitfalls and  
25 the temptation is to engage in this debate, and I find it

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1 frustrating because I don't see it being a good use of our  
2 time. I think this morning when Dick Daniel give his  
3 presentation and you talked about some of the  
4 opportunities, I think everybody in this room had  
5 something on the screen that they could see as an  
6 opportunity to benefit them, and it's unfortunate that we  
7 spend so much time debating an issue like this when there  
8 is all of these opportunities out there that you described  
9 this morning. I think we ought to be spending our time on  
10 that, and for that reason I don't think that it's worth  
11 commenting on specifics because I don't think that it's  
12 worth dignifying.

13 MR. MADIGAN: Alex.

14 MR. HILDEBRAND: First I would like to tell  
15 Marsha and Judith and the other speakers that just  
16 proceeded me, when I think even beyond that, you have to  
17 look at the broad, social consequence, not just the local  
18 social consequence. Like Richard doesn't like cotton but  
19 he probably wears cotton clothes along with 30 million  
20 other people, and see our rapidly growing population is  
21 very dependent on this agricultural output of our state  
22 and the output is going to go down even at best, and we  
23 best not be decimating it by reallocating and this water  
24 savings, and it's really water reallocation.

25 When you take a lemon pie and you reduce a

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1 portion of that by what is used to produce foods and  
2 clothes and increase the portion that is used for other  
3 things, it's a big allocation shift that is involved, and  
4 I don't think that is a proper idea at all.

5 MR. MADIGAN: Thank you. Stu.

6 MR. PYLE: Yes. I would like to support the  
7 CALFED staff position on this right now. I think they  
8 have the right position. They are -- they have presented  
9 here, as I understand it, an exercise because people have  
10 asked that it been put forth but I really think that this  
11 should be handled as a policy question, a policy item  
12 effected by everybody.

13 I just don't think that the numbers address a  
14 policy question. Suppose a number of us got together and  
15 said, "Why doesn't the staff figure out how much water we  
16 could save diverted to other purposes and how much money  
17 could we save the State and Federal and water users,  
18 treasuries if we cease to exercise efforts to salvage,  
19 expand and protect the winter-run salmon?" It's the same  
20 type of thing. You're talking about a social issue, and I  
21 just think that we should say what this tax has done. I  
22 don't think that it supports anything to continue to  
23 refine these numbers because it's a policy number in the  
24 long run.

25 MR. MADIGAN: Ann.

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1 MS. NOTTHOFF: I think Richard is before me.  
2 Okay. First off, I -- you know, I too welcome seeing some  
3 analysis here, and I think that it's important to look at.  
4 You know, the issue of land retirement is only one tool in  
5 the toolbox of water use efficiency. I think that it's  
6 unfortunate, you know, that by using this outside number  
7 of 500,000 acres has generated the kind of heated response  
8 that you heard here because I think certainly we are  
9 only -- you know, they are talking about willing sellers  
10 and phased approach. I mean the fact is that this is a  
11 tool that isn't contained in current law.

12 The information that I have available is that  
13 this CVPIA there is already a list of willing sellers,  
14 there is a total of 27,000 acres, there are already people  
15 that are willing to engage in this. So I think that  
16 certainly by looking at this, you know, from Judith's  
17 perspective maybe a worse-case scenario. This large  
18 number you can start to conclude that there is all of  
19 these unacceptable social impacts, but just like every  
20 other tool that we are considering in the CALFED process,  
21 we are looking at phased approaches, we are looking at  
22 adaptive management, we are looking at try a little bit  
23 here, see how it works, let's see what the benefits are  
24 and the costs there, and I think that this deserves the  
25 same type of considered approach and that there's not --

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1 items to that.

2 This document is so easy to attack that it's  
3 not even sporting but we have to recognize that it's --  
4 you know, I was going to say something nice about it. I  
5 really was, Stay tuned, Lester. It's not over.

6 Obviously we've all seen a lot of these  
7 things. Obviously it's limited in scope to make a lot of  
8 bold assumptions. You can argue with all of the numbers  
9 either way. I think that it deserves some additional  
10 analysis, as Ann said, as one of the tools that might be  
11 available in the toolbox.

12 As far as the price tag goes, I would like to  
13 see some accounting of the externalized costs that could  
14 be avoided through the land retirement, and by that I mean  
15 those significant redirected impacts accumulating and  
16 compounding to the Bay and Delta from the diversions that  
17 have been made to water these lands. I think that would  
18 be a very essential number to factor into that price tag.  
19 Okay.

20 I do think we need to look a lot more  
21 carefully at the jobs that would be lost and the jobs that  
22 would be gained. I don't know what these jobs would  
23 necessarily consist of. Are these the happy tractor  
24 drivers? Are these an exploited under-class of migrant  
25 farm workers? Are they Water Agency managers and

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1 you know, there are pluses and minuses.

2 I also want to say that in terms of the  
3 solution principle, I do not see that it just out and out  
4 doesn't fit with the solution principle because if you  
5 read the solution principle it says that there shouldn't  
6 be redirected significant negative impacts when viewed in  
7 its entirety in the Bay Delta Region or other regions of  
8 California. If you look at any of the management measures  
9 that are under consideration in the CALFED processes, if  
10 there were actually no redirected impacts we wouldn't be  
11 doing much of anything in CALFED. So it's when taken to  
12 look and taken in its entirety. There will be local  
13 impacts on a number of ranges of measures that are being  
14 considered in this process.

15 So I just I think we have to continue to  
16 remind ourselves that this is a huge, complicated package,  
17 that everything is hooked to everything else and that, you  
18 know, by looking at one individually it may seem like that  
19 is a big chunk right there but you have to remember it's  
20 just a piece and it's an interim processes and it's a big,  
21 complicated mess, mix, mess. Excuse me.

22 MR. MADIGAN: Thank you, Ann.

23 And Richard.

24 MR. IZMIRIAN: Well, Ann of course is  
25 absolutely right so I will just add a couple of little

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1 attorneys? I don't know. I would like to see --

2 MR. MADIGAN: Yeah, he is on his way to  
3 getting everybody. Stick around.

4 MR. IZMIRIAN: That's all.

5 MR. MADIGAN: Lester, sure.

6 MR. SNOW: Not sporting, huh? As a sport  
7 fisherman. There is something that is clear to me that  
8 may be a nuance here that I want to be sure that I  
9 reiterate. The issue we are discussing is not whether  
10 land conversion is a part of CALFED. We have it in a  
11 number of programs and it's another issue to be addressed,  
12 how we are going about that land diversion, we have from  
13 the ag perspective the Department of Foods and Agriculture  
14 very large-scale land diversion contained in the CALFED  
15 program.

16 The specific issue here is the concern of  
17 some that it shouldn't be a directed demand management  
18 program. That's what we're saying is not in the CALFED  
19 program.

20 We have land conversion that results and I  
21 think Judith already went through this, I don't think I  
22 want to reiterate it -- that results from the ecosystem  
23 program the levy frame, the Water Quality Program and  
24 probably in some fashion results from transfers such as the  
25 practice of rotational fowling to support rotational

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1 transfers. So it's there.

2 So we are not making a decision that as a  
3 result of CALFED there wouldn't be any change in  
4 agricultural land in the State of California. That is not  
5 the issue. There's a lot going on and we need to figure  
6 out how to deal with that, but it's the large -- it's the  
7 much major issue on this graph that do you want to go in  
8 and by taking land out of production make a bigger move in  
9 this versus using the other tools, and that's what we have  
10 been saying is not on the table.

11 Now, we do happen to think that while it  
12 sounds like some would like us to bury this report, in  
13 fact I think that we probably have done this three months  
14 ago, and really refine the numbers because I have included  
15 everybody in this room in this 150. When we get out on  
16 the street we are all going to get questions like, "okay,  
17 you are talking about storage, have you looked at what  
18 would happen if you just retired a lot of ag land?" We  
19 need to have an answer to that question, and that is why I  
20 think that we do need to try to refine this and have some  
21 better numbers so that we can throw around in a much  
22 larger public debate what are the implication of doing  
23 things like that.

24 MR. MADIGAN: Sunne, Byron, Hap and Alex.

25 MS. McPEAK: I think it -- I think it is

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1 think that farmers make very smart decisions so a robust  
2 market might help in the kind of land transformation that  
3 is likely to go on.

4 I'm not sure what term we are using for the  
5 change in the use of land. As you have flagged, Lester,  
6 there will be land that we transform for habitat, there  
7 may be land that should better be used for other purposes.  
8 My concern when we use land -- the term "land retirement"  
9 that -- the resource manager in me has a violent reaction  
10 to a resource not being used for anything; that it's like  
11 land laying fallow.

12 Now, I may be further complicating this  
13 discussion but there is -- there is another arena in which  
14 I participate which has to do with what is good land use  
15 patterns in the Bay Area and California, and while I don't  
16 think you are supposed to be managing the entire State's,  
17 you know, problems here at CALFED, it is worth having a  
18 dialog around. I think it's stupid to grow houses and  
19 shopping centers on our best soils, and I would like to  
20 know if we took that approach from a resource management  
21 perspective, from a land use pattern because in the Bay  
22 Area we are looking at sustainable balance patterns, the  
23 big issue among a number of other state groups in  
24 California to have a good growth management policy going  
25 forward where we are not doing a lot of in place

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1 important to clarify the terms that we use, and it may  
2 simply be a matter of our own definitions but I think it  
3 clarified repeatedly today, Lester, that when we talk  
4 about demand management we are not including in that land  
5 retirement.

6 We want to talk today about how do we get to  
7 demand, a demand management program that is part of the  
8 core element that we all agree is the most maybe  
9 progressive and aggressive way of embracing a water ethic  
10 and I think and using water efficiently, but I hope that  
11 we are going to leave this discussion understanding that  
12 land retirement is not part of demand management. At  
13 least I think we are using it, demand management is how  
14 for any given application of water use, water management,  
15 how do we do that as efficiently as possible.

16 The dialogue around how do we best use water  
17 in California, allocate a scarce resources, do it in the  
18 interest of society and the economy, I just would suggest  
19 that a lot of people for whom I work think that a market  
20 is a pretty fair way to do that and actually probably the  
21 most efficient way to do that.

22 Recognizing a tremendous amount of work that  
23 the transfers work group has done, Tim and Roger, thank  
24 you for pulling that together, and also acknowledging  
25 their legitimate third-party impacts, quite honestly I

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1 conversion, we are -- we are not taking best ag lands and  
2 urbanizing them, but if we are not going to do that, it  
3 seems to me that we should also want to cultivate that  
4 land.

5 So the question I am posing that is perhaps  
6 making your job a little bit more difficult is do you  
7 happen to know you know what are the best -- what acreages  
8 do we have out there of class one and two soils and what I  
9 think the Soil Conservation Service calls significant  
10 soils that grow the forty top cash crops; do we know what  
11 those soils are, do we know how much acreage and do we  
12 know where they are?

13 MR. SNOW: I do not know at this point, but  
14 given the other ways that we have manipulated data for our  
15 program, we need to pull data in -- manipulate is a bad  
16 word; can you strike that -- realize data, I think that  
17 all of that exists. In fact, I think it's on a GIS data  
18 system, and the three categories that you see are prime ag  
19 lands, lands of state-wide significance and unique lands,  
20 and I think we actually could pull together a complete  
21 inventory of the acreages of those lands by type.

22 MR. MADIGAN: All right. Let me keep going  
23 on the list.

24 MR. HALL: Just one point in response to that  
25 very quickly. Those classifications are not always a good

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1 measure of productivity, and that needs to be considered  
2 in the analysis. If you are going to do a full-blown  
3 analysis on what lands should not be preserved, I think it  
4 needs to extend beyond those inventories that you just  
5 cited.

6 MR. MADIGAN: All right. Byron.

7 MR. BUCK: I don't see it as my roll to  
8 really weigh larger public policies on this but I would  
9 like to pull in on Ann's point on the tool. What is the  
10 value of this as a land management tool? Really what does  
11 the environment get if you retire a half a million acres  
12 in the San Joaquin Valley. It turns out dry years or  
13 anything beyond normal years, not much.

14 It's critical to understand why this is true.  
15 The operations of the export projects are controlled by  
16 the Bay Delta Standards. In other words, the environment  
17 gets its cut first of the water, the project gets what is  
18 left assuming there is demand there to be served.

19 In dry years there is a much larger excess of  
20 demand over supply. So the effect in dry years or  
21 anything really above normal years is that all land  
22 retirement would it do would be reduce the amount of unmet  
23 demand or reduce the amount of shortage and there would be  
24 no additional Delta outflow in dryer and critically dry  
25 years, especially with land retirement program.

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1 enormously bad consequences for particular parts of the  
2 state. Yet it's on the table, we study it, we refine the  
3 analysis, we develop data, we develop all of these points.  
4 Why do we say for the isolated facility?

5 Lester, we are going to look at it very, very  
6 closely and give the public the best possible thinking  
7 about this. But for this other thing, you know, we just  
8 kind of do this, you know, some ways it's very defunctory  
9 kind of study, and really it's just to satisfy 404 and  
10 let's get rid of it.

11 I sense a real difference of how you're  
12 approaching it, actually one facility on the one hand and  
13 the land retirement as a demand management measure tool or  
14 potential tool on the other.

15 MR. SNOW: I guess I'm having a hard time  
16 responding because, I mean obviously I don't see it that  
17 way. We are trying to address problems so we have arrayed  
18 the problems and in each case we tried to come up with  
19 alternatives so that ideally in the case of any given  
20 problem we don't have but one solution to it, and so we  
21 have attempted to do that.

22 That certainly is the case with an isolated  
23 facility, and it remains to be seen whether that is an  
24 approach that has more merit than down side, and that is  
25 what we had discussed last time and actually will discuss

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1 So in essence, getting back to Lester's  
2 original presentation, when you look at the time value of  
3 water land retirement is of really no value to the  
4 environment when the value of water to the environment is  
5 at its highest peak. So when you step back from this and  
6 get away from all of the emotionalism, there is a lot of  
7 pain here trying to create water for very little gain  
8 because you're not creating water when you need it the  
9 most.

10 MR. MADIGAN: Hap.

11 MR. DUNNING: Well, I think Judith and Byron  
12 and the others have made excellent points about this, but  
13 what is coming through to me is two points, fundamentally.  
14 First is this is extremely controversial.

15 Secondly, a large scale land retirement  
16 program is big bucks for nothing.

17 MR. MADIGAN: You read right through that  
18 one.

19 MR. DUNNING: Right. I find it takes me a  
20 while.

21 The second point is aside from being  
22 controversial, people have said that it could be a  
23 disaster. Now, exactly those two kinds would be made  
24 about the isolated facility. It's exceedingly  
25 controversial and it could be a disaster. It could have

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1 a little bit more today, and I -- you know, I guess in  
2 this case, I mean we try to do the same thing. We try to  
3 show a lot of different actions that can be taken to deal  
4 with some of the basic issues, and I think part of us  
5 developing this at this point is to maybe further show  
6 that this is a blunt object at best in terms of addressing  
7 some of the problems in this system.

8 I mean we did make a policy decision that  
9 this is not a water efficiency nuance. That happened a  
10 long time ago, and we are coming back in now to try to  
11 develop some better information on this tool, that is  
12 fairly imprecise in terms of doing the things that we want  
13 to accomplish.

14 In the public debate, I mean this issue can  
15 come up and we can get those kinds of comments back into  
16 the process. I guess I'm just having a hard time making  
17 the precise parallel. You know, we haven't found too many  
18 tools that don't have some down side. I mean what in  
19 general, to kind of broaden this and actually get back  
20 into the land conversion issue, we have a lot of support  
21 for developing title wetlands because they are so  
22 important to the system and everybody generally agrees  
23 it's good for the ecosystem, it stabilizes it, it's going  
24 to be good for water users. Well, in terms of where you  
25 want to do title wetlands you're going to take existing ag

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1 land out of production, and so everything that has some  
2 good quality to it has some down side, and that is the  
3 essence of the deliberations, to try to figure out what  
4 works and what doesn't.

5 So again, I don't see the parallel as you  
6 phrased it; but in fact at this point we're trying to  
7 develop the information so that there's an informed  
8 discussion about this issue.

9 MR. MADIGAN: Alex.

10 MR. HILDEBRAND: First, back on Sunne's point  
11 about having some inventory of the lands we are talking  
12 about, I repeat the request I made in the past that we  
13 find out how much of the ag lands in the Central Valley is  
14 supposedly protected for agriculture by the Williamson Act  
15 and County zoning and various conservation easements. So  
16 we see what conflict we have between marketing water away  
17 from those lands versus preserving them for the purposes  
18 that they were dedicated.

19 We may not be ready yet but at some point in  
20 time I would like to go back on the chart that you have  
21 with that great big green band of how much water we are  
22 going to conserve and recycle and have you give us the  
23 detail of how that width of that band was arrived at. It  
24 looks awful wide to me.

25 MR. SNOW: I can do that. That is part of

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1 six weeks or so, so you will have several hundred pages of  
2 analysis to revel in on how we got to those numbers.

3 MR. MADIGAN: That's a more sporting target.

4 MR. HILDEBRAND: Well, I hope it's right but  
5 I'm skeptical.

6 MR. MADIGAN: Tom.

7 MR. GRAFF: When you were discussing land  
8 conversion it occurred to me that it might have been  
9 useful to the members of BDAC to see a letter that  
10 Congressman Tom Pombo, [ph.], sent which was from my point  
11 of view the most aggressive letter antagonistic to this  
12 enterprise that I have seen from any significant public  
13 official and it particularly imperils the federal funding  
14 efforts going forward. I don't know. Do we not have a  
15 practice of having public official letters in our packet  
16 or should we -- I mean it seems to me going forward  
17 letters of that consequence should be displayed and  
18 answers displayed as well.

19 MR. SNOW: We certainly can share that. You  
20 may recall a Pombo letter was not even directed to us, it  
21 was directed to Trimm and Livingston of one of the House  
22 Appropriations Subcommittees.

23 We have responded and we have engaged  
24 Richard Pombo in some discussion on this issue, but the  
25 significance, those of you not familiar with it, is that

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1 the impact assessment, some of the appendices and the  
2 green bands is comprised of a number of components, and  
3 I'll just give you some of the totals. It has 2.2 million  
4 acre feet that results from urban conservation.

5 From the projection, and this would be  
6 bulletin 16093, and so it includes actually in here,  
7 interestingly enough, we have assumed some additional  
8 savings over the original State projections in our no  
9 action alternative, and then further savings as a result  
10 of the CALFED program to the total of 2.2 million acre  
11 feet.

12 And you may recall this next item was of  
13 controversy. We discussed here the way the San Joaquin  
14 Valley works. We are showing basically 390,000 acre feet  
15 agriculture savings, and then we are showing 1.2 million  
16 acres feet of additional recycling going on. Again, some  
17 takes place in the no action alternative over the base and  
18 then an additional amount is a result of the CALFED  
19 program, so you end up with, roughly speaking, 3.8 million  
20 acre feet.

21 MR. HILDEBRAND: Do we have any reports that  
22 gives that in more detail?

23 MR. SNOW: Yes.

24 MR. DANIEL: That will be in the Water Use  
25 Efficiently appendix to the EIR that will be out in about

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1 the heart of the issue is these incidental impacts on  
2 agriculture that we are talking about that result from a  
3 program of difficulties are highly concentrate in the  
4 Delta and many of them concentrated in Congressman Pombo's  
5 district and they are very concerned about that, the vast  
6 majority and I don't have the numbers committed to memory  
7 of where we see land conversion resulting from especially  
8 the Levy Program but more so the Ecosystem Program is in  
9 the Delta and that is of concern to Congressmen, it's of  
10 concern to the Delta Protection Commission and we have to  
11 work our way through that.

12 The other thing that he raised is he was may  
13 be chastising CALFED for not considering storage as part  
14 of our packages. Of course that is just an oversight  
15 because we clearly have storage. We probably have more  
16 storage on the table than people are willing to pay for  
17 for evaluation purposes, and so we tried to convey that to  
18 the congressman. We expect a follow-up. I can make those  
19 letters available.

20 MS. McPEAK: Okay. So we are going to have  
21 letters of members of Federal and State Legislators in the  
22 packets. Mike Stearns.

23 And by the way, we are trying -- we hope we  
24 will be able to break around 1:00 o'clock for lunch and we  
25 do have eight more speakers so --

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1 MR. STEARNS: Okay. Thank you. Just briefly  
2 I want to I feel better at this point than when I arrived  
3 here because I felt that this was such a disaster because  
4 in my mind it impacted the solution principle so badly,  
5 not only just redirected impacts but I question whether  
6 its durable or even affordable with the need for ecosystem  
7 restoration and water supply or water quality issues and  
8 everything else that still has to be addressed.

9 But I'm supporting what so many others have  
10 already said about I guess how outrageous I saw this, my  
11 first question is if we are required to go through this  
12 exercise, to me there ought to be some consensus on what  
13 is a realistic acreage to use to begin with, if you have  
14 got -- some of these issues you have to deal with the  
15 acreages that have been mentioned here go way beyond what  
16 lands may be available; for example, in the Grassland  
17 Basin where you use 170,000 acres, there is only 100,000  
18 acres that's in the whole Grassland Bypass Project. You  
19 are going to have to be going into the Water Rights folks  
20 and that brings up a whole other issue.

21 I think the other thing that I think needs to  
22 be considered in there is there is a huge amount of debt  
23 service on all of these lands with the water projects and  
24 with their own internal delivery systems and what farmers  
25 have dedicated and committed themselves to through the

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1 water conservation and drainage issues.

2 We alone personally have got close to 400 in  
3 acreage just in the last four years just through water  
4 conservation of drip systems, sprinklers and all the other  
5 equipment that we have made commitments for to live up to  
6 these standards.

7 You know, alternative lands management is  
8 going on right now. I know in Pinoche and Wetlands and  
9 Firebaugh area land retirement is in progress. I think  
10 that if local folks had more of an opportunity to provide  
11 some information about what they see are realistic results  
12 of these things, it would be real helpful to continue this  
13 in a more of a consensus based process.

14 MS. McPEAK: Can we schedule you for the  
15 March meeting to make that report?

16 MR. STEARNS: I'll do my best.

17 MS. McPEAK: Good. I mean I'm not -- this is  
18 of course when you leave me with the gavel, that is just  
19 the risk that everybody has which is to call upon those of  
20 you with expertise to get it on the table because that is  
21 how I kind of think we are going to finally get to  
22 resolutions so we -- and if we don't put you on the  
23 agenda, we don't put the issue on, then the law doesn't  
24 allow us to do it. So you are going to be scheduled,  
25 Mike, and you can call upon others around the table if you

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1 choose to; okay?

2 MR. STEARNS: Thank you. I will certainly  
3 need some assistance.

4 MS. McPEAK: Great. Just let me comment,  
5 when I said I had eight more speakers, that included the  
6 three cards we had from the audience. I understand that  
7 there's a lot more cards out there and we've added also  
8 Annie to the list. So for those of you in the audience  
9 who want to speak on this issue, don't worry, we are going  
10 to hear you. You know, we are going to hear you so you  
11 won't get cut-off just because I had announced an  
12 arbitrary time, and I'll let our chairman figure out when  
13 everybody gets to eat, but Bob Graph is up next.

14 MR. MADIGAN: Bob Raab.

15 MR. RAAB: If it's a given that 500,000 acre  
16 feet is a figure that is way over the top. 500,000 acres.

17 If it's a given that 500,000 acres is over  
18 the top, I think it's also a given that not every acre of  
19 cultivated agricultural land is actually a beneficial use  
20 of California resources. So somewhere between 500,000  
21 acres and zero acres for retirement there must lie a  
22 number, and I wonder if there is some kind of an economic  
23 analysis that would indicate to not every dollar that is  
24 listed as the California gross farm product or something  
25 like 24 billion dollars now, is every one of those 24

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1 billion dollars an actual asset to the gross state product  
2 or is some of that maybe better spent on using ag  
3 resources somewhere else? I don't know, and it would sure  
4 be interesting in there -- maybe there has been a study  
5 done that I don't know about but it would be nice if there  
6 were one done.

7 MR. MADIGAN: Rick, do you want to take a  
8 pass at that. Okay. Alex will take a pass.

9 MR. HILDEBRAND: You know, you want to rely  
10 on market to decide what market to transfer. Why don't  
11 you rely on it to decide what farmland is worth being  
12 farmed.

13 MR. MEACHER: It's called subsidiaries.

14 MR. HILDEBRAND: That is not a good answer.

15 MR. MADIGAN: That is a loop. We are going  
16 to have trouble closing here. Rosemary.

17 MS. KAMEI: Thank you, though. Sunne brought  
18 up the issue of land use and how it sort of comes into  
19 play here, and one of the things that is going on in my  
20 mind is I think that this morning we have demonstrated  
21 that not large scale land retirement will not provide what  
22 we need in water use efficiency; however, if there is any  
23 lack of timing for whatever reason, you know, whether it's  
24 a few acres or what have you, if you don't look at the  
25 land use designation of what is going to happen to that

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1 land obviously in areas where you can convert it to  
2 wetlands or whatever, that is fine, but if there isn't an  
3 open space designation or a specific designation of what  
4 is going to happen to that land, it will convert to  
5 something else.

6 You know, as I have come up over the years to  
7 Sacramento I see more development and you know, obviously  
8 the local entities are the ones who are going to be  
9 responsible for developing those lands, and if there is  
10 land available, something will happen on it. If it's not  
11 growing a product, it's going to be converted to something  
12 else and you know, we are not here to decide on what is  
13 the best and highest use on lands but there is a very,  
14 very long-term implication on having land retirement as  
15 something without saying that it is going to be an open  
16 space perpetuity because as I have seen the, zone changes,  
17 general plans change, counsel's change and what will  
18 happen is that well what is the next best use we are going  
19 to converted it from ag to urban, and I have seen it  
20 happen quite a bit.

21 MR. MADIGAN: Mike.

22 MR. STEARNS: Just a couple of quick points.  
23 I am really glad that it's been on the table and we've  
24 been talking around and while it makes everybody  
25 uncomfortable, it's important to deal with it straight up.

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1 Byron in terms of the time value, I was quite intrigued by  
2 your point about the issue of what does this contribute  
3 during drought years and the issue of where some of your  
4 title conflicts are, but if I took a lesson home from Dick  
5 Daniel's presentation is that we are not just looking at  
6 drought years and determining the value of water. It's in  
7 the normal years as well as the wet years. As you look at  
8 the normal years, the question that came from me was if  
9 you had land retirement, however it's implemented,  
10 contributing to reduction and demand, is it possible to  
11 then to more effectively move water around in the storage  
12 components that we are talking about to have that  
13 available for environmental benefits, and it seems to me  
14 that that is not yet integrated into this analysis, just  
15 being a good piece of information to have. Thank you.

16 MR. MADIGAN: Thank you. All right. I have  
17 ann, and then I am going to go to public speakers. I have  
18 three speakers left so if there are others of you, make  
19 sure that you fill out.

20 MS. NOTTHOFF: Maybe this will help lead into  
21 our next issue. We will do it before lunch. That's what  
22 we are going to do.

23 I think it's important to keep our eye on the  
24 ball here, that is how can we find more water by saving  
25 some of the water that's already being used in the system,

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1 Number two, I really agree with Mike that  
2 there are things now going on, particularly within the San  
3 Joaquin Valley that are very creative. Land retirement is  
4 part of the toolbox of consideration. Also it's important  
5 to get that information to this table. It's the  
6 difference between arguing this out on a idealogical basis  
7 versus what's going on out there.

8 I think the third point I have been thinking  
9 a lot within the CALFED process about phasing, and we  
10 really haven't gotten to that yet within the context of  
11 the alternatives, but it seems to me that one of the  
12 issues that we are going to be dealing with is as we move  
13 along with some of the decision making on the bigger  
14 picture, there are things happening on the ground and  
15 there is going to be a balancing act as we approach that,  
16 and I think that some of the land retirement issues that  
17 are connected with what is really going on in the field  
18 will manifest themselves without us getting into a big  
19 ideological battle about whether this is right or wrong.

20 On the common programs I am interested in  
21 looking at the land retirement component in understanding  
22 where the demand management, how it's going to be  
23 reflected in overall projections of water usage as those  
24 common programs are implemented, and that in part is part  
25 of the phasing consideration, and a final point raised by

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1 and rather than getting bogged down in just one way of  
2 saving water, I think if you look at the big green band up  
3 there, I just jotted down the numbers but it looked like  
4 it added up to about 3.8 million acre feet of water saved  
5 in the proposed efficiency program. Now, that -- and of  
6 that, 60 percent of the water savings and water use  
7 efficiency proposed by CALFED is expected to be gained  
8 through the urban sector, and that to me I would submit is  
9 on its face inequitable since only 15 percent of all of  
10 the water used in the state is used in the urban sector.  
11 So if the agricultural sector has such a problem with  
12 agricultural land retirement, then come up with some other  
13 water use efficiency measures that are acceptable to start  
14 carrying a fair share of water use efficiency in the  
15 CALFED program.

16 MR. MADIGAN: Thank you. Ronnie.

17 MS. COEN: I want to start off with like  
18 everyone in thanking the CALFED staff for doing this  
19 analysis, but the analysis isn't going to be that  
20 meaningful to me if it's not really being considered by  
21 CALFED. I was very disturbed by what I think I heard  
22 Lester say which was that we analyzed it because we had  
23 to, but even though the results look good, the water is  
24 cheap, we are not going to consider it in any of the  
25 CALFED alternatives. I find that unacceptable.

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1 I think if CALFED is able to look at land  
2 retirement and develop a program with acceptable impacts  
3 with low costs, that it needs to be included in the  
4 alternatives and the idea that it's going to be dismissed  
5 out of hands regardless of what the analysis says, I mean  
6 why continue the analysis if you're not really going to  
7 give it meaningful consideration as part of the CALFED  
8 alternatives.

9 I think that the specifics, which is  
10 interesting to me that no one has been commenting on it,  
11 but the specific analysis shows that the water costs are  
12 about \$150 an acre foot. That is less, I believe than  
13 almost any other water supply option that is being  
14 considered by the CALFED program. Even if we wanted to  
15 dispute the numbers, even if the costs are actually twice  
16 as expensive, it's still less expensive than most of the  
17 water supply options being considered by CALFED.

18 I understand that there is concern about the  
19 potential job loss, the net job loss of 6,400 jobs which  
20 as I understand would be spread over many years, and the  
21 analysis of course does not account for other jobs that  
22 could be created elsewhere in the state if a portion of  
23 that water was transferred to other areas. It also  
24 doesn't address opportunities to mitigate that job loss  
25 within the community.

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1 not seeing a lot of dry year benefits from that program.  
2 Well, if you're reducing demand on the system, as Martha  
3 said you may be able to in combination with some storage,  
4 use that water in drought years.

5 So again I think that we have asked CALFED  
6 repeatedly to define what level of reduction and demand  
7 would be necessary to solve the problems in the system, to  
8 solve the entrainment problem and then to figure out in  
9 the integrated resource planning method what mix of tools,  
10 including land retirement and conservation and reclamation  
11 and transfers and conjunctive use, what mixture of tools  
12 will help you reach that goal. That is not the same thing  
13 as taking one tool out of context and saying, well here is  
14 the impact from that tool. We want it to be looked at in  
15 an integrated fashion, and that I think this analysis does  
16 show that particular tool does have a lot of potential to  
17 meet several of the CALFED goals and have a very  
18 cost-effective manner.

19 I want to respond directly to some of the  
20 points that Judith made, and I work with Judith on a lot  
21 of issues. I respect a lot of her views on things and  
22 hope that we can talk about this further but -- and I  
23 think she brings up concerns that a lot of people have  
24 about rural communities but I would like to address some  
25 of those questions. She hits those points head on.

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1 I think Judith made the point that there  
2 are -- there are other examples out there in the world  
3 like the timber communities where doom and gloom was  
4 predicted, and then low and behold but, you know, a year  
5 or two ago the analysis started coming out that in fact  
6 that doomsday approach had not happened, that with job  
7 training and other programs and investments in those  
8 communities that they had really managed to have a healthy  
9 economy and a healthy environment, and I think that we  
10 should aim for the same way. The fact that you discover  
11 an impact and that transitions do in fact cause impacts  
12 does not mean that these impacts can't be mitigated, and  
13 of course there are other values of this program including  
14 increased water supply retirement for remaining users.  
15 The tremendous water quality benefits that we can see and  
16 potential habitat benefits perhaps.

17 As Annie pointed out, we have said all along  
18 that land retirement should be included in the toolbox. I  
19 sort of feel like this analysis was done in a way that  
20 just to give people something to shoot at. You know, here  
21 is what land retirement looks like and we are going to put  
22 it out here by itself. It's integrated into a package of  
23 alternatives, into a package of other measures that could  
24 in fact work if mitigated.

25 Some of the impacts, as Byron said, we are

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1 First she had said that she was concerned  
2 about the assumption in the analysis that land -- that the  
3 funds that went to purchase the lands would not be  
4 reinvested in the community, and she bases that on the  
5 past pattern of behavior that these landowners have not,  
6 in fact, been investing in the communities all along.  
7 Well, if that is the case, then in the absence of land  
8 retirement they are probably still not going to be  
9 investing in these communities. Maybe we can use the land  
10 retirement program to create that kind of investment  
11 program whether it's through a mitigation fund or other  
12 opportunities.

13 I don't think that we have in front of us a  
14 full-fledged proposal of a program that could address  
15 those concerns but I think that that can be done, and  
16 again the timber example is one that came to mind for me.

17 The next concern was about what happened in  
18 the drought and that we didn't necessarily see low-value  
19 crops going out of production or questions whether alfalfa  
20 or cotton were on the crops that come out, I actually have  
21 seen that evidence. It was the low-value crops that come  
22 out; but regardless, a drought is not a powerless  
23 situation to permanent land retirement. I think any  
24 economist will say that people act different in the  
25 short-term than they do in the long-term and that

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1 economists will say that people act different to change if  
2 someone knows that they are taking their land out  
3 permanently. That is not the same thing as making a  
4 decision about on a one-year time frame because you  
5 couldn't know what next year's water flow will be.

6 The third point about overall economic  
7 benefits, again I show this analysis, which I really  
8 appreciate, can add a lot more in terms of overall  
9 economic benefits to the state of apportion of this water  
10 is transferred to other areas where I think that water  
11 will generate a lot more economic benefits, a lot more  
12 taxes, a lot more overall jobs than it probably does in  
13 its present use.

14 And finally in terms of the cumulative  
15 impacts, I don't think that we can just add up the  
16 numbers. I think that that this -- some of the 500,000  
17 acres that is talked about here is the same land that we  
18 are talking about in the water quality program and is the  
19 same land that is being talked about in the CVPIA.

20 I don't want to double count the benefits but  
21 I also don't want to double count the costs.

22 And finally, I did want to just support again  
23 Martha's comments. I think as I said before that we need  
24 to look at land retirement, integrate it in with the other  
25 tools that we have, including storage, to see what kinds

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1 plants, to the dock, to the mainstream in the San Joaquin  
2 River, south of Mendota, north of Mendota, west of  
3 Mendota. We have to remember that that's where the waters  
4 lead. The name "Mendota" in itself is an Indian name and  
5 it means where the waters gather.

6 I have heard comments today, and I appreciate  
7 the opportunity and I came up here to listen to the  
8 comments, and I appreciate the opportunity to respond to  
9 them. The City of Firebaugh had good quality water from  
10 their aqueducts, the City of Tranquility has got water for  
11 me. They are both eight miles north and south of us  
12 Pretty soon their water quality is going to be equal to  
13 our water quality. We have two wells working, two wells  
14 in the town that are under repair because of the salt in  
15 the ground. Fourteen hundred parts per million, not  
16 billion, and one-half that are operating now and the other  
17 well that we have now that we are operating. We only have  
18 two and we don't have no stem on it. The other one has  
19 magnum in the pipes. The other two are laying on the  
20 ground and every two years we rebuild a well because of  
21 the salts.

22 I keep searching for a way to resolve the  
23 problems and I think there is a way. I think there is a  
24 way where we can help agriculture, there is a way that we  
25 can help wildlife. We can work on water quality. What we

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1 of benefits it can give to the whole system. Thanks.

2 MR. MADIGAN: Dave Petre.

3 MR. PETRE: Thank you, Mr. Chairman, members  
4 of the counsel. I appreciate the opportunity to speak,  
5 and I think we are all talking about in the area of where  
6 I live, and I would like to recite a little poem. It's  
7 only about four sentences.

8 Gold is for the mistress

9 Silver for the maid

10 Copper for the craftsman

11 King in his trade.

12 Oh, said the merrimen

13 Stood up in the hall

14 It's water in good quality

15 Water that we need most of all.

16 And that is what we have been talking about  
17 today. So how do we go about doing that with the  
18 contaminants that we have in my area? How do we go about  
19 acquiring more water? How do we get the best use out of  
20 the waters that we have? I think we've exhausted that at  
21 this point in time.

22 There is a need for storage in my area, and a  
23 type of storage that would benefit not only the farmers  
24 but benefit the environment, take care of the contaminants  
25 and help everybody all the way up to the Tracy pumping

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1 need is to retire land in that area. It's going to be  
2 retired anyhow irregardless of whether we want to or not.  
3 We are going to be all in the South Sea.

4 I see water a foot and a half from the  
5 surface just outside of town of Mendora. I have seen it.  
6 All I got to do is go up and down Morra, [ph.] Avenue and  
7 check the stem pipes on the collector line for the  
8 San Luis drain. We have to look at the benefits by way of  
9 economics. We have to look at it by way of politics. We  
10 have to look at plans that are justifiable politically  
11 feasible, economically feasible and justifiably feasible  
12 and we can do that but it's going to take some help from  
13 everybody.

14 Presently the land is to where it is already.  
15 Farmers in the area that have kind of moved to different  
16 areas. There are farmers that have land in areas adjacent  
17 to Mendota that already bought land up on the higher  
18 conference to get out of the South Sink area. They know  
19 it's coming. They know this lands is going to retire  
20 irregardless of the Bureau of Reclamations buys it or  
21 whoever. It's going to be retired.

22 So how do we cope with it? How do we we  
23 solve the problem? There is a way that we can do it with  
24 an ag-related industry that will take care of an  
25 ag-related problem, and that is with food processing but

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1 we have to get it out of our heads that salt isn't bad for  
2 your health. It's hard on the crops. It's hard on  
3 infrastructure. Selenium isn't anything that is  
4 bothersome and that is health hazardous. It's wildlife  
5 hazardous in the way of it takes a form.

6 The way you control the selenium is you keep  
7 it from acquiring oxygen. If you keep it from acquiring  
8 oxygen, then the plant can't consume it. If the plant  
9 can't consume it, then the birds can't eat it, so you bury  
10 it under water with storage.

11 Los Banos, Grandes, they are talking about  
12 storage in Los Banos, Grandes. That's great. But will  
13 that help with the selenium? Would it help with the  
14 salts? Would it take care of the selenium? Does the  
15 sediments that congest the Mendota Pool where the waters  
16 leak and we can't deliver the waters, where the sediments  
17 are contaminated with selenium. In all of the four  
18 entities that pull the water out of the Mendota Pool  
19 irrigated with those waters that are infected with the  
20 selenium, the Firebaugh Canal System, the CCID, the main  
21 canal, the Columbia Canal Water District, then we furnish  
22 water to the south to the Tranquil Irrigation District down  
23 to the Tuley Basin.

24 How did the Pinoche Drainage District 300  
25 parts plus selenium in that area when we have 489 pods per

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1 kangaroo rats, and the pheasants like it used to be forty  
2 years ago.

3 MR. MADIGAN: Fair enough. Thank you.

4 MR. PETRE: Have I said too much?

5 MR. MADIGAN: Nope, but you have gone long  
6 enough.

7 MR. PETRE: All right. Thank you, Mike, and  
8 I appreciate the opportunity, and there needs to be  
9 concern about my area.

10 MR. MADIGAN: You bet.

11 MR. PETRE: Thank you.

12 MR. MADIGAN: Thank you.

13 Mr. Bobker, you're next.

14 MR. BOBKER: Well, Ed, I think I'll take a  
15 leave from you and start out by reciting the epic poem of  
16 Paradise Lost as to the environmental setting for the  
17 program. Maybe after lunch if that is okay.

18 A couple of points. Where do I begin? Oh,  
19 by the way, I'm Gary Bobker with the Bay Institute. It's  
20 welcome to see the analysis that CALFED has prepared. It  
21 certainly raises a lot of issues about -- you know, it  
22 seems to me there is some potential benefits that this  
23 analysis suggests; however, I agree with everybody here  
24 who says that is a very crude analysis. Had we faced this  
25 issue squarely when the process began, perhaps we would

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1 billion come over the Fairfax Ridge in the 1995 flood  
2 flows. It got into the Mendota Pool and they irrigated  
3 with it. The sediment was transported to those areas,  
4 that is all the way to the Tracy pumping plants. The  
5 flood flows have come down that take those sediments, get  
6 into the main stream of the San Joaquin River in the 1997  
7 flood flows.

8 You want to protect the mainstream of the San  
9 Joaquin River? Let's do it the right way. I am talking  
10 about sedimentation controls. I am talking about flood  
11 control. I am talking about controlling contaminants, and  
12 I am talking about taking care of the San Luis drain ag  
13 related industry by way of backup cooling, horse draft  
14 cooling, refrigeration, and we need to go a step further  
15 with freezing.

16 We're going to bring back the socioeconomics  
17 if we can do it in a manner that will help all of the  
18 people involved, not only the farmers, the  
19 environmentalists. We can retire 8,320 acres in the  
20 floodplain zone, a natural floodplain zone from the  
21 Penocche Hills. 8,320 acres, twelve sections. Thank you.

22 MR. MADIGAN: Thank you.

23 MR. PETRE: Then we bring that back to  
24 where -- we can bring that back to where those lands that  
25 would be retired for habitat and wildlife. Get foxes,

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1 have a sophisticated analysis by now, but we are not at  
2 that point. But I agree with everybody who said it was a  
3 crude analysis, and I should remind that you a crude  
4 analysis probably isn't the basis for an adequate need for  
5 a 404 analysis.

6 So that kind of perfunctory analysis based on  
7 the crudeness of the analysis that all of you have pointed  
8 out probably shows that it isn't adequate for that basis.

9 Second, no matter what the scale of the land  
10 retirement program is, there's no question that if we do  
11 one, if we have one that, you know, we can design that has  
12 benefits, and I believe that we do, we can, we have to  
13 address mitigation issues up front. We can't -- you know,  
14 we can't simply treat land retirement as a path that has  
15 no effects, and you know, Judith and others have raised  
16 significant issues. They need to be dealt with.

17 Ronnie is right. We take a global view. You  
18 know, we have to do that I think as a part of this, but  
19 still we also need to look at the impacts on local  
20 economies and mitigate them. But what I would suggest to  
21 you is that beyond just the land conversion, or there is  
22 going to be direct land conversion from things like  
23 habitat or water supply projects or whatever, but we all  
24 know there's going to be unintended impacts. There is  
25 going to be land use changes in the Central Valley whether

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1 you have a land retirement program or not, and what I  
2 would suggest is a directed land retirement program  
3 actually allows you to deal with up front, look at how you  
4 can actually accomplish some land use changes in a way is  
5 very sensitive to the impacts because if you don't,  
6 they're going to happen any way to some extent and you may  
7 have worse impacts. I think that actually gives us a  
8 better way to do a better planning process.

9 There's some discussion about land retirement  
10 violates the basic solution principle. I disagree with  
11 the whole concept of how people are applying solution  
12 principle here, but that whole issue aside, land  
13 retirement assumes that it's okay to push it somewhere  
14 else and that somewhere else doesn't have a cost, and that  
15 is not a fact. You know, if we go with approaches that  
16 manipulate the hydrograph that has costs, that's not a  
17 free lunch and we need to look at that.

18 I would suggest we are at a point where if we  
19 are going to make CALFED work, we have to get away from  
20 looking at one or two main elements and look at the mix.  
21 I mean we have used this phrase, "it's cliché. We need a  
22 mix of strategies." But you know, that's the only way  
23 that it's going to work because if we concentrate all of  
24 the all on one area, it's not going to work.

25 So we need a land retirement program that's

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1 it seems to me when you look at land retirement you have  
2 to do the same thing. Just throwing out 500,000 or  
3 800,000 doesn't do you any good. That is just giving you  
4 a boundary, but you need to do the incentives analysis and  
5 look at the mitigation costs, the cost benefits, how it  
6 would interact with reoperation and storage, conjunctive  
7 use, what you're banking, and that's what you might base  
8 your recommendation as to the extent to which you would do  
9 a land retirement program.

10 It seems to me we need to get to a much more  
11 sophisticated place and analyze land retirement before we  
12 can even address this issue.

13 I guess that is about all that I want to say.  
14 Thank you, Mike.

15 MR. MADIGAN: Okay. Those are the three  
16 speaker slips that I have. Roberta has asked for the  
17 opportunity to present the Water Environmental Water  
18 Program views prior to our breaking for lunch, and this is  
19 the appropriate time. Roberta.

20 MS. BORGONOVO: I will be brief because I  
21 have heard many of the comments being posed in what I am  
22 going to say, but I wanted to talk about the overall  
23 approach that those of us that we worried about the  
24 environment are taking the approach the whole CALFED  
25 solution, and we really want to look at the underlying

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1 effective and that isn't miticable. We need to look at  
2 how we can do get wet banking in a way that doesn't put  
3 all of the strain on diverting water out of the system  
4 because of the environmental uncertainties that are  
5 associated with that. We need to look at the conservation  
6 recycling in the markets, all of those are going to be  
7 important but if we take part of it off the table it's  
8 just not going to work. We are going to push too many of  
9 the impacts to something else and then the level of  
10 impacts to somebody else's interests is probably going to  
11 be too high to be acceptable.

12 So how do we figure out what is the  
13 appropriate mix. Well, one the ways is by approaching  
14 land retirement as we do other things from the view point  
15 of assess activity analysis. Let's take a look at a  
16 potentially very controversial element of the CALFED  
17 element and this is physical storage facilities. Okay.  
18 CALFED has proposed up to, what, 6 million acre feet of  
19 offstream storage in Central Valley. Now, has CALFED  
20 proposed 6 million acre feet? No. What they are saying  
21 is that they are looking at up to 6 million acre feet and  
22 they are going to a certain activity analysis that says  
23 where does it make since given potential environmental  
24 impacts, given the costs, given the operational impacts.  
25 Were it to make sense to even put a number on that. Well,

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1 causes of decline in the Bay Delta and we want to focus on  
2 what would be ecologically appropriate and cost effective  
3 in dealing with the cumulative depletions of the fresh  
4 water out to the Bay Delta and the impact of dams in our  
5 recent pumps on the system, and we want to also address  
6 the lack of the accrued cost pricing which does confuse  
7 the way that we manage and develop water in California,  
8 and we think that the detriment of the environment.

9 So just in summary, we developed criteria to  
10 look at the ecosystem, the water use efficiency program,  
11 the storage conveyance components and any CALFED  
12 alternatives. Basically the entire community was really  
13 saying that they believed that natural processes and the  
14 more efficient water management processes would be  
15 superior to solutions that required more intervention and  
16 additional structural components, and that any solution  
17 long-lasting had to cap the depletion within the watershed  
18 and exports out of the Delta, and we felt that otherwise  
19 we would be -- we would be perpetuating the unsustainable  
20 conditions of inadequate stream flows and habitat  
21 degradation.

22 So that was, that was where we came from, and  
23 when we looked at the three alternatives a year and we did  
24 have a preference for alternative one because it relied  
25 most heavily on habitat and efficiency measures and the

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1 least on structural elements but we waited for the CALFED  
2 process to unfold, and we think that there has been a lot  
3 of work done on meeting retirement and water quality from  
4 the storage side and from the conveyance side, and we  
5 wanted to have equal weight given to that reduction and  
6 demand side.

7 We also felt that to make an EIR/EIS credible  
8 you really had to develop all three alternatives to meet  
9 the CALFED objectives, and one way to meet the CALFED  
10 objectives for the first alternative was to have this  
11 aggressive program to reduce diversions.

12 So you have heard a lot about what reducing  
13 diversions could do. It could give you greater  
14 flexibility and the pumping schedules, it could effect  
15 entrainment, it could go a long way toward habitat  
16 improvements and it could increase water flow reliability,  
17 and I just want to talk very briefly with water supply  
18 reliability. In the urban sector we have seen great  
19 strides in reducing water use through conservation and  
20 through reclamation, and for example in the metropolitan  
21 water districts there useage is down 500,000 acre feet  
22 after the drought. In East Bay Mud Services District  
23 there useage is way down. All of the California urban  
24 water agencies that Byron represents have done a great job  
25 in water conservation. We think that there has to be an

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1 equally strong program in ag conservation.

2 The question we really asked CALFED was how  
3 much water would it take to reduce the diversion so that  
4 you could meet some of these CALFED objectives reducing  
5 the entrainment and increasing the liability, and there  
6 was a reason for the amount of water that was put forth in  
7 the letter that NRDC was the principle author for and  
8 several of us signed, but basically that was a place  
9 holder. It was a place holder and it was based upon the  
10 reduced pumping that would have to be achieved to equal  
11 the benefits and isolate facilities, and that was about  
12 3 million acre feet. But what we were asking for was the  
13 analysis, it could be more, it could be less and certain  
14 people have said we were asking for a whole mixture of  
15 tools to be evaluated in the same way that Integrated  
16 Resource Planning evaluates their tools, and it's that mix  
17 of tools that we think need to be out there on the table.

18 I received a letter from Alex in which he  
19 asked to have some of these questions brought forth and  
20 discussed. In we don't put them out here and discuss  
21 them, they are discussed all the time in small groups and  
22 Byrons and in papers and with legislators and we saw it as  
23 the legitimate responsibility of BDAC to discuss it here,  
24 and I also think that in order for any of us to sell the  
25 CALFED solution no matter what sector we come from, we

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1 have to know the an I assumptions Monday which the work is  
2 going forward. And when we say that certain things were  
3 taken offer the table, what we were really is open up the  
4 box, make the boxes as broad as possible, don't take a  
5 scenerio review of water management and then let us do the  
6 costs effective anal advertise with all of the social I  
7 don't economic and environmental external tease that needs  
8 to be included and then apply them with the CALFED  
9 principles.

10 MR. MADIGAN: Thank you, Roberta. All right.  
11 Thank you. Thank you very much.

12 We are going to break for lunch. It is now  
13 twenty-two minutes after 1:00, and we should be back  
14 before 2:00 o'clock so that we can start approximately at  
15 2:00. We will resume Phase Two report and do the best we  
16 can with the remainder of the time.

17 ---oOo---

18 [Lunch break]

19 ---oOo---

20 MR. MADIGAN: The first item on the agenda is  
21 going to be the assurances and finance. Major issues. We  
22 are going to take those out of order and then we are going  
23 to go back and pick up the Phase II report. Questions of  
24 assurance and finance major issues are going to be dealt  
25 with by Mary Scoonover and Mike Reynolds, and Mary is

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1 first up.

2 MS. SCOONOVER: Good afternoon. I want to  
3 spend a little bit of time first reviewing the process of  
4 assurances. What we mean by assurances, what process have  
5 we undertaken to pursue or two try to develop assurances  
6 for this program and then some sense of the significant  
7 issues that have been identified through this process.

8 First, again, when we take about assurances  
9 we are knots talking about assuring a particular outcome,  
10 we are talking about assuring that the solution, whatever  
11 it may be, the preferred alternative, whatever it may be,  
12 will be implemented and operated as agreed.

13 In addition, there is a certain amount of  
14 reality that every aspect of implementation probably won't  
15 occur just as we envisioned it; therefore, a contingency  
16 plan or something to deal with circumstances beyond our  
17 control which prevent either a key component from being  
18 implemented or operated it is agreed is what we are  
19 looking at is kind of the second part of the assurances  
20 effort. So a sure implementation and operation is agreed  
21 and develop a contingency plan to deal with your Honor for  
22 seen consequences.

23 Again, just a brief review of the need for  
24 assurances we are talking about a very complex program  
25 that would be implemented over, oh, in multiple different

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1 phases. There's no way that an entire program can be  
2 implemented at the same time. There are also pieces that  
3 are logical to go forward first, things that have  
4 environmental review complete, things that are programs as  
5 opposed to actual construction and therefore it's going to  
6 be a phased implementation. It depends on who implements  
7 the solution. That would make a significant difference,  
8 again, in terms of the kind of assurances.

9 Each component has different needs for  
10 assurance. The needs for assurance for the ecosystem  
11 restoration component for example may be very different  
12 from the needs for assurances for the levy program, and  
13 finally there are a variety of stakeholder concerns that  
14 are raised for which assurances need to be given. People  
15 need to have some level of certainty that the program,  
16 even if it's a goods one, will actually be implemented and  
17 that it's going to be operated appropriately or operated  
18 as agreed so those are some of the background needs and  
19 again just a quick review of the processes that we have  
20 undertaken. The BDAC advisory counsel established a  
21 working a group, the assurances working group, and  
22 appointed Pat Benning as chair of that group, and Pat's  
23 group working with staff and members of the public as well  
24 as the CALFED agencies came up with this approach to  
25 trying to define or trying to craft a preliminary package

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1 the program.

2 Now, where are we? At the last assurances  
3 work group meeting which was in early December, the staff  
4 proposed an outline form describing assurance  
5 alternatives, and identifying areas where we thought there  
6 had been either agreement or a lack of debate, and where  
7 there were areas of disagreement trying to present the  
8 different options for were available to satisfy what the  
9 issue of concern was. It was a very interesting debate, a  
10 very interesting discussion.

11 Consequently what we are going to be doing or  
12 what we are doing is we are retaining that proposal based  
13 on the input that we got on the work group and the next  
14 work group meeting is February 25th and we are going to be  
15 looking at this refined proposal with all of these  
16 different options.

17 Again, the point is to try to define areas of  
18 agreement and areas of disagreement and focus on the areas  
19 of disagreement to see if we can at least come up with the  
20 variety of options to satisfy the differing interests  
21 needs and concerns. But there were a few significant  
22 option policy issues that the work group address entered  
23 our last meeting that are I think important to bring to  
24 your attention and that is what I really wanted to run  
25 through today. The first is a fairly basic one but one

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1 of assurance. First we identified the program elements  
2 and tried to identify the assurance needs associated with  
3 each program element.

4 Then we looked at stakeholder concerns,  
5 issues and concerns that were associated, and these are  
6 all shorthand notations for what was a fairly lengthy  
7 process and there's lots of information available if any  
8 of you are interested in that information, looked at the  
9 tools, everything from constitutional amendments to  
10 informal agreements, looked at different management  
11 structures, who will implement differing elements and  
12 looked at a whole spectrum from existing institutions and  
13 entities operating within existing authorities to totally  
14 new entities to make sure that we can bracket the range  
15 and started putting pieces together. The idea then was to  
16 take all of these things and hold them up to these  
17 guidelines or principle that we established as being  
18 things that any package of assurance alternatives out to  
19 satisfy.

20 So for example, the last column understand  
21 guidelines, any assurances insurance package out to  
22 involve the public, any assurance package out to strive to  
23 minimize costs. Any assurance package ought to make  
24 certain that the solution presents the program solution  
25 principle have been satisfied. So that's an overview of

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1 that is very strongly is a very strongly held belief among  
2 the stakeholder communities. The stakeholders want to  
3 have timely meaningful involvement in the decision making  
4 process that will be part of the implementation process.

5 Now, there is a disagreement. There is no  
6 agreement at this point on exactly what form of  
7 involvement that participation out to take. But it is one  
8 of the comments that we hear over and over again. We are  
9 looking at options from advisory committees antics,  
10 program components to program-wide advisory committees to  
11 whole new institutions and which stakeholder might sit as  
12 members of the Board, for example. So again, not  
13 eliminate too many alternatives but there was I would say  
14 unanimity at this of opinion of the stakeholders and of  
15 the work group and meaningful and timely involvement was  
16 important.

17 Kind of in the same vein, there is a number  
18 of stakeholders who are concerned with implementation,  
19 that the implementation be tied to clearly articulate  
20 performance criteria or performance standard. How do you  
21 know when a program has been successful? How do you know  
22 if you're on schedule? Again, because the components  
23 differ, you're not talking necessarily about numeric  
24 targets for each and every one of the program components.  
25 So there's agreement between the group members that some

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1 way to measure successive implementation was important.  
2 Some of the work group members suggested that  
3 performance criteria without a whole lot more definition.  
4 There was agreement that these performance criteria may  
5 vary by component and wouldn't necessarily be numeric  
6 targets, but that is about as far as we got in terms of  
7 agreement on the appropriate approach for measuring  
8 success.

9 The one area where the work group did come to  
10 agreement was in identifying the need for a new entity to  
11 implement the ecosystem restoration component of the  
12 overall program. Again, there wasn't agreement on what  
13 the agreement ought to look like, what form that entity  
14 ought to take, but there was general agreement that a new  
15 entity, meaning either some kind of a joint-powers  
16 authority or a totally new entity that would be governed  
17 by a board of directors or in which stakeholders would  
18 participate was definitely something that they wanted to  
19 pursue. No final agreement, again, on the form that that  
20 new entity should take, but there was agreement that  
21 whatever that entity was, it had to very closely  
22 coordinate with implementation for the Respite Program.

23 You can't implement ERPP in isolation. That  
24 was the message and that was the message that we heard  
25 very clearly from the work group members. When you talk

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1 working on.

2 And the final issue that I want to raise to  
3 you, and these overheads are available and the BDAC  
4 members that should have had them in your places and there  
5 are extra copies outside if you're interested, is the  
6 number of participants in the work group are concerned  
7 with the potential for mis-operation of an isolated  
8 facility. Now for some of those individuals the  
9 advertising of the facility actually makes a difference.  
10 It's a lesser concern if you're talking about a 500 CFS  
11 facility than if you're talking about a 50,000 CFS  
12 facility. Of course those numbers are a bit extreme, but  
13 that is the generally tenure.

14 For others, the issues are present -- the  
15 same issues are present regardless of the size. How to  
16 assure operation of a facility's perpetuity is probably  
17 one of the most difficult issues that we have been  
18 wrestling with in the assurances work group.

19 Similarly on a related vein, there are a  
20 number of members of the work group who also express  
21 concerns that an isolated facility will affect water  
22 supply in Delta water quality and in the incentive to  
23 provide long-term upkeep and maintenance of the Delta  
24 levies.

25 So these are some of the big issues. There

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1 about program-wide implementation, you do have to  
2 integrate all of the components. Since parts of the ERPP  
3 realize onstream flows, obviously the water or the storage  
4 and conveyance components and the management and the  
5 coordination between management of that component and the  
6 ERPP are absolutely essentially.

7 Two more I want to bring to your attention,  
8 and then I'll ask if there are other attendees other work  
9 group members who want to add to them. The last two are  
10 some pretty tough issues, crooked as well but pretty tough  
11 issues, and that is a concern primarily for members of  
12 environmental community that any assurance given to water  
13 users, any kind of regulatory certainty given to water  
14 users, particularly through some kind of an endangered  
15 species habitat to the Conservation Plan or some  
16 connotations will necessarily result in greater assurance  
17 to the water user than to the environment.

18 So the concern is this unequal level of  
19 assurances and a desire by some of -- well, a desire by  
20 those same members of the work group or participants in  
21 the work group to assure that the environment got the same  
22 kind of -- same kind of assurances that the work group or  
23 that the water users did. So it's the commensurate  
24 assurance concept. Again, how that translates into a  
25 specific assurance measure is something that we are still

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1 were a lot more issues surfaced in the last discussion.  
2 Work group members had anticipated seeing a revised work  
3 group paper by this time, however the limits of staff have  
4 put that deadline off a bit. We are hoping to get that  
5 paper out within the next couple of weeks.

6 The other pieces of information that would be  
7 available shortly that may be of interest to you all is a  
8 draft of a research project that an executive fellow who  
9 has been working with the program has been working on.

10 Some time ago the assurances work group began  
11 asking questions about, well, how have they done it  
12 elsewhere; how does Chesapeake Bay handle these issues;  
13 what does Everglades do? So we embarked upon a research  
14 project to look for research and financial issues to look  
15 at three programs, the Columbia, the Everglades and the  
16 Chesapeake, and this is a draft of that report that will  
17 identify kind of the basis of those programs, what  
18 initiated them, what assurance mechanisms they have used,  
19 how successful they have been and identify some, if any,  
20 applicable principles to what we are doing now.

21 It's as much an informational document at  
22 this point as a heavily analytical document, but I think  
23 it will provide a lot of useful information for going  
24 further for doing additional research. That paper also  
25 will be ready by the second week of February and will be

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1 mailed to BDAC members and to the assurances work group  
2 and to members of the public, if you're interested. It is  
3 a draft report so it's really very preliminary, but I  
4 think the information is enough that we want to try to get  
5 it on the street as soon as we can. That is the wrap.

6 I guess the only remaining question probably  
7 would be how will assurances be dealt with in this EIR/EIS  
8 that is coming out. A lot of what I just explained to  
9 you, especially the preliminary information shows how we  
10 define assurances. Here is the process that we have used  
11 to try to come up with the preliminary package of  
12 assurances, and here are some of the big issues that have  
13 been identified as well as a discussion of the need to get  
14 from a draft, from the draft EIR, the final EIR to a final  
15 implementation package and some discussion of the process  
16 that we will use to get from here to there is what will be  
17 incorporated into a document that will accompany the  
18 EIR/EIS. So it's not going to be "here's the  
19 implementation plan" again or "here is the assurances  
20 strategy" because without a preferred alternative it's  
21 somewhat difficult to come up with a specific plan, and  
22 because these are very complex issues and the number of  
23 people who need to be involved are just getting involved  
24 in the process and we still have a lot of work to do, it's  
25 an amazing task and we are working our way through it so

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1 of long-term trust that is necessary for long term  
2 success, any suggestions along those lines would be very  
3 much appreciated. Thank you.

4 MR. MADIGAN: Alex.

5 MR. HILDEBRAND: It's obvious from this  
6 discussion and previous discussions that all of the  
7 assurances groups made a valiant effort, and we really  
8 don't have very good assurances and it's back into this  
9 business that the schedule appears to be such that we are  
10 going to pick a preferred alternative before we know how  
11 well you can assure one alternative versus another, and I  
12 am very much concerned that that puts the cart before the  
13 horse. You know, what level of assurance, what level of  
14 assurance you can provide with each alternative before you  
15 make the pick is difficult at best, but what is more  
16 feasible for some alternatives than others. So we need to  
17 know that answer before we make a pick.

18 MR. MADIGAN: Leland.

19 MR. LEHMAN: At the risk of jumping an issue  
20 a little bit, again I have been thinking a lot about this  
21 as everybody here has and it strikes me that somewhere in  
22 here as we think about the assurances package there has  
23 got to be a consideration of the phasing, and it's partly  
24 of dealing with the integration of the common programs  
25 into the alternatives.

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1 it will be as much a status report and a road map for  
2 getting from here to there as it will be any kind of "and  
3 here's the ultimate answer document."

4 That was all that I want to add. I don't  
5 know. Hap, do you have other things to add or other  
6 members? Stu and Alex attend regularly.

7 MR. MADIGAN: Hap.

8 MR. DUNNING: Let me just -- understanding  
9 what Mary said, with regard to her fifth point with regard  
10 to the isolated facility is simply an example of a very  
11 evasive problem that we deal with in the assurances  
12 context and that is deep concerns about the keeping of  
13 promises, deep concerns of words on paper won't pan out  
14 later. It's not just how any isolated facility might be  
15 operated.

16 We have seen it in recent months in CALFED  
17 with concerns about B-2 implement, CVPIA, whether it come  
18 from the environmental interest. We talked about it this  
19 morning with regard to the slippage on the allocation of  
20 water rights responsibilities for meeting the '95 water  
21 quality, so I don't know quite how we get out of this  
22 problem but there is a long history of things that have  
23 happened rightly or wrongly that have left individuals and  
24 interest groups to be untrusting, and any suggestions as  
25 to how we might deal with that and help to create the kind

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1 There are -- even if we agreed tomorrow on  
2 the facility, we have got five, ten, fifteen years of  
3 studies, figuring out where something would go, how it  
4 would be built, how it's going to be financed, and we  
5 haven't any problems, and to a certain extent I get  
6 concerned as we legitimately deal with the alternatives  
7 question we are not paying attention to some of the  
8 immediate issues that we still have to deal with in terms  
9 of entrainment, in terms of water quality, in terms of  
10 meeting the standards.

11 So it's kind of how do you -- the chicken and  
12 the egg. You have to keep moving forward and putting this  
13 information on the table, that goes without saying, but  
14 somewhere in here there has to be -- we have to start  
15 groveling with perhaps the issue of phasing, of what  
16 pieces might come first, how do those pieces work, how do  
17 they build trust, how do they begin to stack in a  
18 direction. I just don't see how you can go to the ending  
19 and say, "We have a package and it's going to work," and I  
20 think that issue, the assurances question is the most  
21 vulnerable to that.

22 MR. MADIGAN: I have good news and bad news.  
23 The good news is that we were faced with the issue and we  
24 started to address it in the assurances work group. We  
25 have an outline of what we call four distinct phases and

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1 general rules, i.e., you have to finish all of the rules  
2 before you can move to the next phase. There has to be  
3 enough in each and every phase to keep commitment to buy  
4 the stakeholders of the CALFED agencies throughout the  
5 processes and incentives for everyone who wants to comply  
6 with the process.

7 The phasing is divided into immediate, what  
8 do we need to do between now and the final EIR/EIS to  
9 assure that we are in a position to actually implement  
10 whatever the answer might be to near term; what do we do  
11 to assure implementation in the near term; who is going to  
12 implement these things; even if we decide a new entity is  
13 necessary, that takes time so who can do it now, near  
14 term? You know what things are ready to go and just have  
15 to be implemented, and then the long-term and who is going  
16 to be kind of watching the store in the long-term.

17 Again, we are just getting going, and that is  
18 the bad news. I don't have an answer for you. We do take  
19 it seriously. I do think that it's essential, and this is  
20 where all of the program elements were going to be coming  
21 together. So greater detail on your phasing plan is  
22 clearly on your immediate horizon for our next few months  
23 worth of meetings.

24 MR. MADIGAN: Stu.

25 MR. PYLE: I have been participating in the

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1 MS. SCOONOVER: What we were trying to do is  
2 look at other complex natural resource management efforts  
3 where you had differing levels of government involved,  
4 either Federal and State or State and local, and the whole  
5 array as well as active participants from the general  
6 public.

7 In other words, it was an issue that a lot of  
8 people had a lot of stake in. That is how we selected  
9 those three programs initially. Initially we handled ten,  
10 and we realized that we had definitely bitten off more  
11 than we could chew and decided to start with these three  
12 programs first because there was a lot of information  
13 available about them and because a lot of people have held  
14 them up to us as a model that we ought to follow.

15 I mean the answer is none of them are  
16 directly applicable or we can't pick them up and use them  
17 as a specific model or precise model for what we are  
18 doing, but I think there are value in each of one of them,  
19 including their failures. We can learn a lot from them  
20 through this process.

21 MS. BORGONOVO: I would just like to suggest  
22 that of those three, none of these three at least the  
23 anadromous fisheries, there is anadromous fisheries in the  
24 Chesapeake and the Everglades, and the ones in the  
25 Columbia River it turned out to be a disaster. So I would

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1 assurance work group, and I think Hap at one time was a  
2 little frustrated on coming to grips with some of these  
3 issues and getting something on paper. I think when you  
4 see when this is preparing, I think it's going to be a  
5 pretty good document, and it covers a lot of things that  
6 we are all concerned with.

7 I have to agree with what Martha says about  
8 the interim plan. I think we are all concerned about  
9 making sure that everything moves ahead together. There  
10 is a great flurry, as we are going to see in the next  
11 agenda item, of items that are moving ahead on the  
12 environmental restoration front, and I think all of us  
13 support that and want to see that move ahead, but we want  
14 to also see that the other aspects of the plan are moving  
15 ahead as well together. We don't want to see just one  
16 element in the program get funded, move ahead, get  
17 accomplishments made while the rest of the subject is  
18 still under discussion. So somehow early on we have to  
19 come to agreement on how do we all, to use a term that is  
20 in our circle, how do we all get well together.

21 MR. MADIGAN: Thank you.

22 MS. BORGONOVO: I want to ask, I understand  
23 the connections with the models that you chose, the  
24 Everglades, Chesapeake and the Columbia River with the  
25 assurances.

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1 suggest that -- I don't know if the other -- part of the  
2 other remaining seven had included anadromous fisheries  
3 but it would be nice to get a model where we as a  
4 stakeholder are addressing the anadromous fisheries, that  
5 that is included in one of the models.

6 MS. SCOONOVER: I don't recall if the other  
7 seven were believed to be successful models for addressing  
8 anadromous fish problems. At this point I couldn't tell  
9 you.

10 MS. BORGONOVO: I just hope that we don't  
11 look at the Columbia River as an example of something that  
12 we should be following.

13 MS. SCOONOVER: Well, as I say, I think that  
14 there is as much to learn from these processes failures as  
15 from their successes.

16 MR. MADIGAN: Thank you, Roberta.

17 MR. DECKER: I want to ask Mary two  
18 questions. First, when you talk about implementations and  
19 clearly articulating criteria that is important in all of  
20 the common programs, was that your intent?

21 MS. SCOONOVER: Yes, yes, that's the idea.

22 MR. DECKER: My second question was when you  
23 talk about a new entity, the one assurance group that you  
24 did attend there was discussion on setting up the one  
25 entity at this for ERPP and then leaving the operations of

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1 that project over here on the side and that was a worry.  
2 Was that part of what you were having expressed about the  
3 way that you operated a facility, and was there a  
4 discussion of how you might combine the operations? Is  
5 that going to be part of ERPP.

6 Mare mare: During an earlier work group  
7 meeting, I can't remember how long ago it was, it was  
8 probably in May of last year, we had identified an entire  
9 range of identifying management options for everything.  
10 So we were looking at totally new entities to implement  
11 every portion of the program to new entities to implement  
12 just a variety of portions. I mean we really looked at  
13 the spectrum.

14 What the work group seemed to agree on was  
15 that it would be very difficult to turn over water  
16 operations to a new entity, operations of new facilities,  
17 and the question was, well, where do you draw the line  
18 because the new facilities obviously have to be  
19 coordinated with the old facilities, there are existing  
20 contracts and it very quickly got in this institutional  
21 issue that seemed to surface, but the biggest concern that  
22 the participants had was whether or not ERPP was going to  
23 be implemented effectively and was there going to be  
24 money, was there going to be authority, was this going to  
25 be a priority. And so that is where since that time most

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1 decided and how do we try to assure that that actually be  
2 done. I think, you know, there are as a contrary of  
3 political scientists over the past decade who have studied  
4 implementation retrospective where they look at programs  
5 that have been implemented and why they went off track and  
6 so forth.

7 I am not aware, and I have an idea maybe we  
8 are trying to get a little ground and look at this  
9 prospectively. Mary, on the preliminary results with  
10 regard to the Chesapeake, Columbia and Everglades studies,  
11 do we have any sense in any of those situations that the  
12 people doing the work self-consciously identified  
13 assurances as a discreet area rather than simply designing  
14 their program and saying, "This is the program that we  
15 intend to carry out; somehow we stumbled into something  
16 which I think is quite novel."

17 MS. SCOONOVER: I do. In some of those  
18 efforts there was considerable attention paid to how do we  
19 implement this thing because we have so many different  
20 governmental entities with authority over so many either  
21 geographically defined locations or issues, so for a lot  
22 of them that aspect of implementation was important for  
23 the financing.

24 How can we assure that even if this is a good  
25 thing to do? We can get funded for this. That is

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1 of our effort has focused.

2 Now, there is a realization of how this ERPP  
3 entity coordinates with the rest of the implementing  
4 entities or whomever that may be is very critical because  
5 you're right, the link is absolutely essential; but no, we  
6 don't know, we haven't gotten to a point where there is  
7 agreement as to how that ought to work or whether it's  
8 going to be existing entities or some other new kind of  
9 entity that deals with operations, but the decision -- the  
10 recommendation was made from the work group not to try to  
11 couple ERPP implementation with a new entity to operate  
12 facilities at the same time.

13 MR. DECKERR: But you perhaps did look at the  
14 operating element of the ERPP so that it has priority over  
15 operations. Did you talk about that?

16 MS. SCOONOVER: We have not gotten into  
17 detailed discussions of operations as yet. There has been  
18 a lot of supposition but we have not done a careful  
19 analysis of exactly how that would work.

20 MR. MADIGAN: Thank you.

21 Hap.

22 MR. DUNNING: Just quickly to respond to  
23 Roberta, wouldn't that be a program question, how you  
24 design your program, whether ERPP is taking priority in a  
25 certain situation, we are looking at, okay, whatever is

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1 actually an ongoing problem in most of these efforts, but  
2 there really as far as we have been able to ascertain and  
3 we have been doing both literature research as well as  
4 personal interviews with people involved in the processes.  
5 We have not been able to identify a comparable effort to  
6 what we are doing in any of those three efforts.

7 MS. BORGONOVO: Just going back, perhaps a  
8 question with one point, we talk about the ecosystem  
9 regrouping and the assurances grouping at least having a  
10 dialogue, and I guess when you take a look at the  
11 different pieces, that is what is starting to happen now  
12 with CALFED, all of these pieces being integrated, but  
13 it's really important. So it's as if the assurances is  
14 the only place that we seem to be integrated, but when you  
15 come back to the ERPP and you ask how it will be  
16 implemented, it goes right back to assurances.

17 So it's just trying to have the kind of  
18 discussions where you can -- we can all be understanding  
19 the way the different work groups are thinking.

20 MR. DUNNING: As a matter of history on all  
21 of this, those had followed the reports on assurances over  
22 time. We pretty early in the process started out on a  
23 case study and we will sort of a division of alternatives  
24 to do our case study on, and the idea was we sort of  
25 practice all of this and then when there was a preferred

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1 alternative, we then apply our new-found skills to the  
2 preferred alternative.

3 That has all kind of changed now. The case  
4 study sort of faded into the woodwork and we are sort of  
5 proceeding in terms of general principles, and of course  
6 we don't have an alternative to work under. Is that a  
7 fair accusation, Mary, of what is happening?

8 Mare mare: Yes, and I think that the other  
9 thing that we found is that so much of the program is  
10 common to every alternative. The issues of how do you  
11 assure the ecosystem program remain constant that we have  
12 been trying to focus on those common areas, so we have  
13 made I think greater strides in restoring the ecosystem  
14 restoration program than in examining either the case  
15 study or some of the other options for water supply  
16 reliability. The recognition being, though, that from all  
17 of us, that again we have got to solve everybody's problem  
18 or at least everyone has to get better. We can't  
19 necessarily be satisfied if we get a great assurances  
20 package for one element and not the others.

21 MR. DUNNING: Did you think whatever we do  
22 there is no production against change and surprise in the  
23 future? As I have said on other occasions, I think we  
24 need to keep our specific expectations about this whole  
25 thing realistically.

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1 MR. RAAB: I would envision Robert Moses who  
2 ran the City of New York with about as many district  
3 stakeholders as we have here.

4 MS. McPEAK: And so that would mean that you  
5 are talking about a person, one person to at the head of  
6 some agency or inch at this time to do this.

7 MR. RAAB: I would consider a small board of  
8 advisors, yes.

9 MR. MADIGAN: Moving on from great moments  
10 in BDAC, Hap.

11 MR. DUNNING: I have to plan my comment very  
12 clearly, Mike but here is a very specific kind of thing we  
13 have been trying to deal with just to give the assembled  
14 group an idea of our problems of course through a new  
15 entity Mary talked about I knew entity and the agreement  
16 that there should be some sort of new entity. Suppose  
17 it's a new entity that is not going to deal with an  
18 operation of new facilities. It's going to deal only with  
19 the ecological restoration part of it, the Delta  
20 Environment Restoration Authority let's call it or  
21 something like that. Okay. It has to be a board.

22 Stakeholders want to be involved. Which  
23 stakeholders. Do we say this is the environmental part of  
24 the implementation of CALFED? So that should really be  
25 the environmental community that is represented on that

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1 MR. MADIGAN: I am for being realistic.  
2 Bob.

3 MR. RAAB: That would be in my mind the most  
4 important component of assurances is not the ten  
5 commandments. You come up with who becomes the czarina of  
6 ecosystem protection and how strong that person will be,  
7 will he be reasonably immunized from the governor.

8 MS. McPEAK: The czarina is also a  
9 possibility.

10 MR. MADIGAN: Come on, Bob. Give us some  
11 slack

12 MR. RAAB: I'm too old to get into that. The  
13 strong person, whoever it may be, needs to be immunized  
14 from the President of the United States.

15 MR. MADIGAN: Okay.

16 MR. RAAB: I do think that another thing we  
17 need is to get that czar or czarina in place as soon as  
18 possible. Assurance is the ball game to me.

19 MS. McPEAK: Can I ask a question of you Bob,  
20 your using the term as if it's one person you are not  
21 suggesting it is only one person that is the institution  
22 that oversees this. I would guess, and if you are  
23 answering your own question that is how we get the right  
24 entity in places to oversee this, what would you, what  
25 would you create what would you envision.

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1 board and controls this new entity or do we say all the  
2 different players and stakeholders are vitally interested  
3 on how the ecosystem restoration takes place. So we have  
4 something that is reflective of say more or less what we  
5 have with BDAC, we have ag people, we have urban people.  
6 Which is the way to go.

7 MS. McPEAK: The latter.

8 MR. MADIGAN: Yeah, the later.

9 MS. McPEAK: You're posing a serious question  
10 and I am answering it quickly but it seems that there  
11 has -- there has -- there has got to be that multiple  
12 stakeholder participation.

13 MR. DUNNING: We don't have multiple  
14 stakeholder participation in running the facility.

15 MS. McPEAK: I think the change that  
16 happened, now let me get back into it because I think that  
17 what was the dialogue between Roberta and Mary was looking  
18 at the full spectrum of the elements of CALFED was a piece  
19 of -- as a part of ecosystem restoration, and that that  
20 does suggest to me oversight, input, and however we get  
21 funds to structure the legal tension between administrator  
22 and a policy board, that is this facility.

23 MR. MADIGAN: Yeah, I think it is the larger  
24 rather than the smaller. I mean that sound painful but  
25 how else do you get there? Roberta then Tom.

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1 MS. BORGONOVO: We were going to comment on  
2 the ERPP and we are prepared to talk about that but there  
3 is certainly a model at least being set up. One of the  
4 things the scientific review panel talked about is they  
5 talked about broad stakeholder involvement throughout the  
6 process because otherwise you never have the public  
7 support to carry a program forward. We are looking  
8 forward twenty-five to thirty years.

9 MR. MADIGAN: Tom.

10 MR. DECKER: In listening to this, this is a  
11 tough question but I think you're somewhere, you are going  
12 to have to land with some kind of recommendation, and you  
13 being a can stakeholders yourself -- I mean take a lesson  
14 from the world. We have been talking about czarina,  
15 princesses, et cetera, but as you can see --

16 MS. McPEAK: Princess and peas.

17 MR. DECKER: I do think that is where the  
18 direction is but you're going to have the intellectual  
19 because your sore were political science and intellectual  
20 dribble for years with this stuff and you really do need  
21 to get landed, and some would rest their case on the fact  
22 that you're going to have the kind of stakeholder  
23 representation but some Czarina that is going to make  
24 something happen because the ability to make something  
25 happen in this process is beginning to slightly slip

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1 know, this is what the agency should do by a certain time  
2 and if you don't do it, something will happen  
3 automatically just by the provisions of the law, and  
4 sometimes it got into things like putting a freeze on  
5 permits for new sources that the agency didn't do the  
6 right kind of regulation or having default standards come  
7 into effect if the agency didn't set them on time because  
8 there were always concerns that of same thing we saw this  
9 morning with Walt Pettit.

10 I mean, you know, getting a complex set of  
11 regulations out on time is often a very hard thing to do,  
12 and yet people get agreed that if it doesn't happen  
13 however impractical it may be. So there are opportunities  
14 in some aspects of what we are talking about to simply put  
15 in provisions in some governing legislation that say if  
16 "X" gets too far out ahead of "Y" then "X" stops or goes  
17 at half speed or something. So there may be some  
18 possibilities there. It won't work in all cases because a  
19 lot of this is just so judgmental that you couldn't,  
20 couldn't and shouldn't try to write it in legislation, but  
21 some of it could be done that way.

22 MR. DUNNING: You could do all kinds of  
23 things in legislation, and then what happens when the  
24 Legislator comes in is it's ignored. Author, correct me  
25 if I am wrong but the static I remember is that EPA met 14

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1 through your fingertips, and I hope that you know that you  
2 will at least not completely reject some strength of  
3 leadership that will make -- let us get started.

4 MR. MADIGAN: All right. Thank you, Mary.  
5 Thank you, Hap.

6 Moving on, Eric, do you want to introduce  
7 Zach? All right.

8 MR. HASSELTINE: Zach McReynolds.

9 MR. STRELOW: I hate to raise this if you  
10 harking back to the cases when I was a regulatory there  
11 was at least one model that might have at least one roll  
12 to play here that I honestly hadn't thought of this in  
13 connection before because it's here when we talk about  
14 assurances, we are often thinking of different program  
15 elements, and people want to make sure that the water  
16 supply provisions don't outrun the environmental  
17 protection measures.

18 The kind of assurances that we were involved  
19 in a lot in much of the Federal Legislation that EPA  
20 administers didn't have that element but it was more a  
21 matter of the Congress trying to ensure that, assure that  
22 the agency administrators, like myself, were doing what  
23 they thought they wanted us to do, and you know, they were  
24 very capable and very clever at putting provisions in  
25 Clean Air Act, Clean Water Act that basically said, you

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1 percent of all statutory deadlines.

2 MR. STRELOW: Yeah, but that is precisely why  
3 some of these provisions were put in after that. For  
4 example, the hazardous waste legislation says if you don't  
5 issue certain regulations on time, then some regulations  
6 that were in effect written right into the statute would  
7 automatically go into effect or there would be a ban on  
8 certain kinds of disposal, so it was very automatic. I  
9 mean there was no if's and's or but's about it, and that  
10 was a pretty drastic after the kind of statistics you  
11 mentioned.

12 MR. DUNNING: It's automatic that you -- the  
13 new form comes into place but it's not automatic that it's  
14 complied.

15 MR. STRELOW: Well, it's the law you can have  
16 citizens suits or whatever. A lot of those have worked.

17 MR. MADIGAN: It is a thought and it's  
18 offered up. Fair enough. All right.

19 Before you go, I have speaker, Eric. Don  
20 Dalino, [ph.], on the water assurance.

21 MR. DALINO: For the record my name is Don  
22 Dalino. I am one of the attorneys for the Delta Water  
23 Agency. I am also manager. I would like to hand out some  
24 excerpts of the law on the question of assurances.

25 MR. MADIGAN: God knows what he just did

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1 but --

2 MS. McPEAK: Pardon me?

3 MR. MADIGAN: I said God knows what he just  
4 did but --

5 MR. DALINO: The question of assurances is  
6 one that we are very concerned about being in the interior  
7 of the Delta. It is a fundamental concern of ours that  
8 permeates our total consideration of what is going on in  
9 CALFED, and I think that it is this difficulty that  
10 presents the alternative of an isolated facility as one  
11 that is totally unacceptable to us, and I would submit it is  
12 contrary to existing law.

13 Now, to start with -- and I won't belabor  
14 with you too much of this but I think it's helpful that  
15 each one of you has some of the law because as the  
16 projects develop, the State Water Project and the Central  
17 Valley Project, these same issues were confronted by those  
18 who proceeded us and as we understand it, the Delta  
19 Protection Act, which is 12200 of the Water Code, and  
20 maybe Stu, Stu Pyle was involved when that thing was  
21 developed, but basically what happened was people that  
22 wanted to export water from the Delta promised the people  
23 in the Delta that there would be a common pool of water,  
24 that they would share the same water quality that we share  
25 so that if something bad happened to the water, it would

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1 When you take 80 percent of the Sacramento River water and  
2 run it through an isolated facility, you are not  
3 integrating the releases from storage to the maximum  
4 extent possible. So I would urge that -- although I  
5 understand the need for various alternatives, I would urge  
6 that you address or ask Lester to address the legal  
7 principle that are inherent in the Delta Protection Act  
8 and how you feel you're in compliance with those.

9 Now, in terms of the operation of the water  
10 projects, if you look and see what is happening you will  
11 find with CALFED itself you have the Federal regulators  
12 and the State regulators, the State Water Project Operator  
13 and the Federal Project Operators all together. We do not  
14 have an independent regulatory group overseeing the  
15 operations of the projects. We have the State regulating  
16 the State, the Feds regulating the Feds and it's the fox  
17 in the chicken coup. There is no independent review.

18 They have even drawn the State Water  
19 Resources Control Board into the framework agreement.  
20 They participated, State Board staff, Participated in  
21 negotiations of the Delta accord. They're independents as  
22 a judicatory body to independently rule on water rights  
23 have been comprised by the integration of them into this  
24 process. So we have no independent forum overseeing these  
25 very powerful units that are operating these projects,

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1 happen to their water, too; and therefore, there was a  
2 common interest in its preservation.

3 It also agreed that they would only take the  
4 extra water, surplus water; so therefore the incentive for  
5 new water project development was placed on the people  
6 that were exporting to see that that was done, and if they  
7 couldn't get new water development, then they would back  
8 off on exports and leave the Delta, the areas of origin  
9 intact.

10 Now, what has happened in that process has  
11 not been very good. You people, yourself, without a  
12 change in legislation, I guess it's the staff  
13 recommendation at this point have proposed an isolated  
14 facility, your third alternative, that would violate the  
15 common pool that is mandated in 12201 of the Water Code.  
16 It also violates, and if you look at 12205, and this is  
17 the second page from the end of the packet, it's -- it's a  
18 policy statement that says, "It is the policy of the State  
19 that the operation and management of releases from storage  
20 into the Sacramento San Joaquin Delta of water for use  
21 outside the area in which such water originates shall be  
22 integrated to the maximum extent possible in order to  
23 permit fulfillment of the objectives of this part."

24 Which means enhancements of the common pool  
25 of water in the Delta for both in-Delta use and export.

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1 which is the State and Federal Government.

2 So we think that the assurances, and we will  
3 try to get more active with Hap and Mary on it, but we  
4 think that those assurances ought to address the  
5 operations of the projects separating the regulators from  
6 the operators, establishing an independent board or better  
7 establishing the independence of the State Board and also  
8 trying to maintain the common pool.

9 I didn't want to belabor this but I thought  
10 it was worth mentioning, and in particular I wanted to  
11 hand you out the law. I know we have a roomful of  
12 law-abiding citizens. We have a room full of people who  
13 believe that a deal is a deal and you ought to live up to  
14 it, and we expect you people and the State of California  
15 to live up to the promises that were put in the Delta  
16 Protection Act, and we think it's improper to go forward  
17 with any seriousness with any kind of an isolated facility  
18 that would damage the common pool concept which we think  
19 is the only real assurance that we can get, and that is  
20 that everybody is really interested in protecting the  
21 water quality of the Delta. Without that common interest,  
22 we're trying to push an elephant up the hill.

23 Thank you very much. I hope I didn't take  
24 too much time.

25 MR. MADIGAN: Thank you very much.

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1 Appreciate your input, and the question of the legality of  
2 the matters is on Mr. Snow's agenda. Thank you, sir.

3 Eric, you're up, and Zach.

4 MR. HESSELTINE: Okay. We are here today to  
5 talk a little bit about what is going on in the finance  
6 work group for the last two years, and basically we have  
7 been traversing the same path, I guess, and the assurances  
8 group on other group and the other work groups in  
9 attempting to deal with the implementation of this overall  
10 program once its defined, and in our case we're looking at  
11 starting where we are today with the current status of the  
12 Delta and moving towards some set of objectives that will  
13 be set forth within the program under the various headings  
14 that we've have all come to know so well.

15 From the financial point of view, obviously  
16 this is going to be an expensive process and there is the  
17 funding levels that are going to be required have been  
18 estimated to be in the billions of dollars.

19 How to, number one, determine from whom that  
20 money is going to come to pay for the program is the first  
21 question. And the second question is what financial  
22 mechanisms are available to those parties to in fact  
23 fulfill that responsibility. And so we haven't really  
24 even approached the second half of that yet because we are  
25 still wrestling with various questions which really boil

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1 needs to be a way to more or less define what the benefit  
2 is and to assign some sort of a value to that benefit.  
3 And then in addition to that, you need to identify who the  
4 various beneficiaries are; in other words, who are the  
5 principle receptors of that particular benefit, and then  
6 the costs should be allocated back to those beneficiaries.

7 Now, that is sorts of a benefits-based  
8 approach to cost allocation and in general that's the  
9 approach that we are taking in the finance group as a  
10 recommendation back to BDAC.

11 There are a number of side issues to that  
12 that we are going to be getting into today, and there are  
13 two in particular. I had two basic questions that we're  
14 going to lead up to today and then throw out on the table  
15 because it's two things that we need some help with where  
16 our meetings have continually gotten bogged down. I think  
17 as it was put yesterday in our meeting there this broad  
18 agreement on the general approach and there is violent  
19 disagreement with the details of implementation.

20 So in allocating the costs out by benefit, as  
21 you can imagine you can either do that in a very broad way  
22 or you can do it in a highly detailed way. There are some  
23 techniques that have been suggested that are very highly  
24 technical in nature that mathematically will attempt to  
25 take a particular benefit, break it down in components and

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1 down to who should pay for this, and as you can imagine  
2 that is quite a contentious. All of the people who are  
3 currently participating in the current Delta system and  
4 taking water out of it are clearly paying something for  
5 that water. They are paying the costs of the current  
6 operations of the Delta system.

7 We are now talking about super-imposing on  
8 top of that a very expensive new program for the benefit  
9 of everyone, presumably, but that is carrying an  
10 additional price tag, and how to allocate those costs out  
11 then becomes a very, very difficult problem to do.

12 The way in which we are approaching this -- I  
13 want to give you sort of a broad background and then we  
14 will get into details of some of the pains that we want to  
15 talk about. But the program will be made up of a series  
16 of sub-programs, each of which will have a number of  
17 actions identified as to things that will actually be  
18 done, and to those there will be certain costs assigned.

19 From those particular actions, conceivably  
20 there are benefits associated with those actions or we  
21 wouldn't be doing them. So the actions that produce the  
22 benefits are what needs to be paid for but the benefits,  
23 number one, have to related to that cost in some way, that  
24 is sort of a given as a groundrule that you are not going  
25 to do something that isn't worth doing so -- but there

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1 assign on the basis of fairness and equity exact  
2 allocation of those costs. If you do that for every  
3 single action, break it down into benefits, break it down  
4 to beneficiaries and then try to break down the costs  
5 associated with that, you can imagine what a monstrous  
6 job that's going to be but that might be the most  
7 equitable overall.

8 On the other end of the spectrum there is the  
9 thought that when we finally get down to good solution for  
10 CALFED and the recommendation of how this is going to be  
11 paid for, there is obviously going to be some sort of a  
12 negotiations amongst all of the stakeholders and all of  
13 the agencies involved, and so it really may be that we're  
14 we are looking for is not necessarily the most  
15 mathematically precise equitable solutions, but what we're  
16 really looking for is what is a politically acceptable  
17 solution to the majority of the people of California.

18 And if that's the case then maybe there's  
19 some ways to do some broad-based allocations as at least a  
20 starting point to where those negotiations ought to  
21 proceed. And so we have tried to address that whole  
22 spectrum of possible cost allocation methodology, without  
23 making any prejudgments as to what exactly that's going to  
24 be, like the assurances group and as mentioned by Hap,  
25 have been getting very, very anxious to do one of these

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1 case studies to try out all of these things. We've had a  
2 number of different cost allocation methodologies  
3 presented to us, and we would love to try those out on a  
4 particular case to see how well they really work and see,  
5 can we really do, you know, a sort of an eyeball, waiting  
6 in the arms type of allocation that comes even close to  
7 what one of the mathematical approaches might do; and if  
8 so -- and if so then that certainly would be a way of  
9 cutting through a lot of time and a lot of effort which  
10 might, you know, in the end not be needed at all.

11 So I'd like to start off by saying that and  
12 with the first viewgraph, that regardless of what the cost  
13 allocation methodology is going to be, we are going to  
14 have a set of principles, a set of financial principles  
15 much the same as the overall program itself is based on  
16 solution principles. We are going to have some financial  
17 principles that pertain to our decisions about allocating  
18 costs primarily and who should cost, and then eventually  
19 these will also relate as to how and what mechanisms would  
20 actually be used for those payments.

21 So if we could get into the first, the first  
22 viewgraph is basically our summary as of now as to the  
23 financial principles that we're going to apply to our cost  
24 allocation methodology. It's going to be based primarily  
25 on benefits; that there is a split between the public

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1 CALFED goals, and then the actual determination of what  
2 the cost allocation methodology is going to be.

3 First of those is the benefits based, and  
4 this brings up I think one of the major problems that we  
5 have run into at the finance work group. One of the  
6 problems also we have in this business is semantics. The  
7 same word keeps popping up in a variety of different  
8 contexts, and it's also difficult when you're using words  
9 to explain things when those same words are being used as  
10 overall major objectives for the entire program.

11 But in terms of the benefits-based approach,  
12 the issue here is -- and I guess we have got in a little  
13 bit out of order to talk about -- the main issue is the  
14 baseline.

15 We have this, this sense that the Delta is  
16 out there now and this program is going to take it to  
17 something else, and somehow we're going to have to pay to  
18 get it there. Now, you could -- you could describe that  
19 as restoration of the Delta, you can describe it as  
20 enhancement of the Delta, and there is certainly a school  
21 of thought that says that's the program and that is what  
22 everybody has to help pay for.

23 There is another school of thought that has  
24 been expressed very strongly within the finance group that  
25 says that there is also a mitigation component to this in

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1 agencies, the public agencies primarily defined as the  
2 Federal and State Governments, the funding that would come  
3 from them versus the water users, the beneficiaries within  
4 the State that are acquiring water for whatever purpose;  
5 that there will be additional charges to people who are  
6 water users. They're paying now but somehow they have got  
7 to participate in the financing of this program, so there  
8 are going to be charges assigned to water users, and what  
9 the basis for that is going to be is a very, very  
10 difficult question.

11 We have to take into account the ability to  
12 pay. In some cases we may find that the benefits may be  
13 worth a lot to the people in general but that specific  
14 individuals or specific groups of people who benefit from  
15 a particular action may not be able to pay for that  
16 action. An obvious case in point is in the levy  
17 restoration. People who are farming or living behind the  
18 levies cannot possibly be expected to take on any sort of  
19 a major share of the financing or reconstruction of that  
20 levy.

21 Crediting is because a lot of people, a lot  
22 of agencies are now already proceeding with programs which  
23 will either be part of or will contribute to the CALFED  
24 program once it's implemented, and what credit should be  
25 given for money that is being spent to, in fact, pursue

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1 that in the sense of the public trust that was discussed  
2 earlier this morning, in the past even though people and  
3 public agencies have pursued the taking of water, the  
4 diversion of water and the use of water in the Delta for a  
5 variety of purposes all of which at that time were  
6 consistent with public policy, all of which at the time  
7 were consistent with good practices and considered to be  
8 in everybody's best interest.

9 The fact is that somehow the combination of  
10 all of those practices over the years has led us to where  
11 we are today and which is now necessitating this whole  
12 program to try to go back in and somehow change the  
13 conditions within the Delta, restore if you will or  
14 enhance if you will, some new set of conditions that  
15 everybody recognizes as being improved.

16 So there is a feeling among many that some of  
17 the uses of past should somehow contribute in a direct way  
18 up front to get us to sort of a baseline and instead of  
19 everybody starting to pay to get it from where it is today  
20 to where we wanted to go, that there is some other set of  
21 conditions in the Delta that could be defined as in  
22 relative to some previous condition perhaps, but it's  
23 somewhere between where we are today and where we really  
24 wanted to go to so there is some initial step in there  
25 that needs to be taken, according to this point of view,

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1 that should be financed in a way that relates directly to  
2 those who have been historically users in the Delta, and  
3 that -- it sort of implies that we starting this whole  
4 funding process with something of a deficit, and how is  
5 that -- is there in fact a deficit; how is it to be made  
6 up if there is; and who owes and who needs to pay to get  
7 that done.

8 The idea is is that there is mitigation out  
9 there that has not yet been compensated for not yet been  
10 financed and that needs to be done initially. So that is  
11 where we are really hung up on that because as you can  
12 imagine there are very strong opinions on both sides of  
13 that issue.

14 So one of the things that we want to bring  
15 back to BDAC at this point is we really need your help in  
16 establishing what this financial baseline is. We've heard  
17 the word baseline used and I suspect that we are going to  
18 be using it in a variety of applications throughout this  
19 whole program but we need to identify where we're going to  
20 start with the financing of this, and if we are, in fact,  
21 going to admit some degree of mitigation up front, then we  
22 need to have sort of a separate cost allocation  
23 methodology to deal with how that particular task is  
24 financed and who pays for that and what are the criteria  
25 by which those costs are assigned assigned since we would

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1 relates to that. It's what all of the costs are going to  
2 be including essentially bringing the ecosystem back up to  
3 some initial point if it's not what it is today. The  
4 baseline agreement relates to that as well. And then in  
5 prison basically once we have established that point  
6 whether it's where we are today or it's some improved  
7 version, then in order to get to the overall objectives we  
8 look -- we are going to be looking at strictly benefits  
9 based approach.

10 One of the other reasons incidentally for  
11 proceeding with the whole concept of a negotiated approach  
12 is that the benefits of the entire common program almost  
13 are very, very difficult to quantify. In all of the  
14 environmental restoration program, for example, is  
15 involved in doing things that are considered to be  
16 essential and important to be done in Delta, and we know  
17 what they cost but it's very difficulty to put a dollar  
18 value on the benefits that derive from that, and it's very  
19 difficult to then assign benefits in a dollar form to a  
20 so-called beneficiaries if that is anything different from  
21 the entire public. There is a school thought that it is  
22 the entire public and that the entire public and the  
23 public based funding ought to pay for the common programs.

24 There's another school of thought that no,  
25 it's not the entire public but it's a sub-set, and

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1 not be talking about benefits, per se, in that context.

2 So we have really gotten hung up on that and  
3 it's really difficult to move ahead with an overall  
4 methodology without knowing where you're starting.

5 Now, it's interesting that yesterday there  
6 was a suggestion made that perhaps we ought to start with  
7 a negotiation on that point in order to be able to define  
8 that first degree of mitigation and who is going to pay  
9 for it and how much, that instead of trying to sit down  
10 and do a detailed analysis of that, we revert to the other  
11 approach right away on that and sort of negotiate that  
12 out, and it's basically that, you know, whether or not the  
13 water users are willing to pick up some sort of cost up  
14 front to get -- to establish that baseline then go through  
15 your cost allocation methodology for the rest of the  
16 program, which of course in the end leads to another  
17 negotiation if we take that particular path.

18 So it was kind of an interesting concept.  
19 Once again that might be a way to spare a lot of pain, but  
20 it is otherwise going to be involved in this but it's  
21 something is that I think BDAC as a whole and ultimately  
22 CALFED is going to have to look at very carefully, and  
23 certainly we would like some feedback on that particular  
24 points today.

25 So -- let's see. This is -- this simply

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1 furthermore, it ought to be tied to the water use in order  
2 to be able to send price signals, in order to be able to  
3 encourage people to use less water, to use it more wisely  
4 or else they will be penalized economically. So that's  
5 another argument that we are into, and it's a difficult  
6 one to resolve.

7 Let's go on to the next item. Now we're at  
8 the split between the public and the users that I referred  
9 to, and again one of the main reasons for this to be  
10 considered and defined is the difference in that for the  
11 users you can pretty well quantify benefits, whereas for  
12 the public you can't. And so we can split out that simply  
13 on the basis of what the different actions that are being  
14 taken and what's being done and assign those that we  
15 really can't quantify, those that we can't hear.

16 Then you may all recall that we had at almost  
17 one of the first BDAC meeting we had this discussion of  
18 public and common benefits and actions to be taken. It's  
19 difficult to explain. I don't want to revisit that  
20 because it was confusing then, it still is. There is a  
21 very good treatment of that, by the way, in that document  
22 that was put out almost two years ago now about the round  
23 table, business roundtable, the Farm Bureau and the  
24 Manufacturers's Association and the California Chamber of  
25 Commerce for Financing Options for Water Infrastructure in

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1 the State of California. A lot of what they have in that  
2 is going to be germane to what we are doing here. It was  
3 a very good piece of work.

4 So primarily, initially splitting between the  
5 public, the common uses may help in the costs allocation  
6 methodology simply because the allocation methodology is  
7 likely to vary dramatically between these, specially if we  
8 are using the benefit-based methodology.

9 Oh yeah. So now, in keeping with the  
10 "Viewgraphs-R-Us" motto of BDAC we wanted everybody to  
11 know that the Financial Work Group is perfectly capable of  
12 making section viewgraphs also. And what we have here is  
13 basically we have the public up there --

14 MR. MADIGAN: Yeah, summarize that for us,  
15 would you, Eric?

16 MR. HASSELTINE: Yeah, I will. We have the  
17 public up there and we have the property owners and you  
18 have the diverters, facility contractors and water users  
19 over here. We have a variety of the common programs are  
20 over here. The benefits from them flow both to the public  
21 and to the users. You have storage and conveyance, the  
22 benefits of which flow both public and the users, and then  
23 through various techniques of financing mechanisms the  
24 money goes into the overall institutional oversight which  
25 runs the whole program and everything gets done. So now

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1 everybody give a reasonable estimate of what's fair to the  
2 various parties concerned as a starting point. If you  
3 simply say, okay, there are some benefits of the common  
4 program which will be picked up by the users, then the  
5 question is how do you do that? And how do you then  
6 allocate those costs amongst all of the users.

7 MR. MADIGAN: That is the first time that I  
8 ever saw a Pentium chip number ship done in four colors.

9 MR. HASSELTINE: Hey, how about that.

10 So we get back to then a user charge or an  
11 user fee which is an idea that has been used in the past,  
12 I think it was in Resolution 1630 I think, I know it's in  
13 this document, and the idea is that there is some sort of  
14 a Delta charge for everybody who is using water out of the  
15 Delta, and that is part of the overall financing of this  
16 program and it helps. That is the portion that goes to  
17 pay for the ERPP, it goes to pay for the Water Quality  
18 Program it goes to pay for the levy restoration, things  
19 that where it's very difficult to say, "Hey, this is the  
20 benefit you're getting and the dollars, in the dollar  
21 value," that you can then, you can then trade off against  
22 the dollars that your being asked to pay.

23 It's just something that in order to do the  
24 program and in order to have completed the task that has  
25 been set forth here and that is being required of us now,

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1 you know. That's what we are trying to get to. Now it's  
2 a matter of filling in the blanks.

3 I just wanted to sort of illustrate how that  
4 would -- and you know, the most important point of that is  
5 that most people in this room are probably in three or  
6 four of those boxes because everybody is a member of the  
7 public and we are also all water users and we all may use  
8 water in different ways as we break it down here.

9 MR. MADIGAN: I'll also say that there are  
10 fewer than 150 people that understood that previous chart.

11 MR. HASSELTINE: Maybe that's going to be one  
12 of the tests, one the questions on the exam.

13 Okay. So far as user charges are concerned, once  
14 again -- and this is start to get into now for the use --  
15 for the actions and the benefits which are specifically --  
16 it's on this, I knew that did this. For the -- for the  
17 benefits which are specifically coming from the storage  
18 and conveyance and can readily be assigned to the users  
19 this is not difficult. But for the common program  
20 benefits, it is, it is hard to define what the benefits  
21 are to the users, and unless you say that all of the  
22 common programs benefits are going to go to the public  
23 side of the financing, then your stuck with trying to  
24 define -- and it may simply be a technique as has been  
25 suggested by our Vice Chair that we simply sort of

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1 you're going to have to pay something to still be part of  
2 the Delta system, and so the costs needs to be calculated,  
3 needs to be determined how that would be allocated out  
4 amongst all of the different users but and it's different  
5 than the benefits base because you can't really put a  
6 value on the benefit.

7 So these are all of the questions that we  
8 would have to answer about that and that is really the  
9 second issue that we wanted BDAC to address. Is it  
10 reasonable to assume that we are, in fact, going to have  
11 this Delta surcharge, this Delta charge to all users of  
12 the water in the Delta specifically to help pay for what  
13 in effect are the environmental programs and the common  
14 program block.

15 MR. GRAFF: Eric, a quick question. You just  
16 said -- the one example that has actually been implemented  
17 limited to the federal users with CEPIA and it did make a  
18 distinction between urban and ag and it made a separate  
19 distinction for a group of users within the problem who  
20 were not asked to give up water as were others.

21 MR. HASSELTINE: We would anticipate that  
22 those distinctions would be made under the basic heading  
23 that there is going to be a user charge for some  
24 particular block of the program, but now how those user  
25 charges are allocated would follow the lines of some of

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1 the distinctions that you've mentioned, undoubtedly.  
2 MR. GRAFF: But already there are --  
3 MR. HESSELTINE: For example we think that  
4 based on what water you use you're paying something say  
5 per acre foot but that doesn't mean that the rate for acre  
6 foot is the same for urban as it is for agriculture as it  
7 is for some other use.  
8 MR. GRAFF: And this has been completed  
9 upstream --  
10 MR. HESSELTINE: We can have as many  
11 categories of users as you want and then, you know, that  
12 is one of the sub-problems. The biggest that we want to  
13 ask right now is whether or not this program is headed  
14 towards some sort of a user fee, user charge for taking  
15 water out of the Delta.  
16 MR. HILDEBRAND: And if you just make it on  
17 who takes water out of the Delta, what do you do about the  
18 City of San Francisco and East Bay Mud who take water that  
19 ought to run down the Delta first before it gets there.  
20 MR. HESSELTINE: You're right, Alex. Yeah,  
21 that was a misstatement on my part, and we're going to get  
22 to that right now.  
23 MR. MADIGAN: That's part of the summary of  
24 the presentation; right?  
25 MR. HESSELTINE: Put up the map so we have

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1 by everybody who is paying in.  
2 Those costs are going to be allocated out  
3 according to some methodology, and in the end if that  
4 was -- if that was satisfactory right there, that would be  
5 the end of it. However, we feel that undoubtedly there's  
6 going to be specific situations where the benefits to  
7 particular groups of people may be far in excess of their  
8 ability to pay, and so there has to be some exceptions,  
9 there has to be some way of dealing with that particular  
10 problem, and there has to be -- and if that's not  
11 acceptable to everyone then you have to go back and either  
12 eliminate that particular action or modify it so that you  
13 reduce the level of benefits that those people are  
14 actually receiving to some point which is affordable. One  
15 of the basic solution principles is that this whole thing  
16 is supposed to be affordable. So this falls in line with  
17 that.  
18 The issue of crediting comes up because there  
19 are -- as you all know for example we've got Category  
20 Three programs going and people have been encouraged to be  
21 involved in those. We feel that all of the funding  
22 sources are obviously going to have to be coordinated, and  
23 there was talk about some, you know, central Czarina or  
24 whatever for the assurances. Well, the same type of thing  
25 is obviously going to be needed for financing.

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1 that.  
2 MS. McPEAK: There are two charges either  
3 diverting out or diverting --  
4 MR. HESSELTINE: We're saying anybody who is  
5 using water that went through the Delta or would have gone  
6 through the Delta had it been left in its natural course.  
7 So again, another nuance to how you break down these  
8 categories but we are not extracting anybody.  
9 MR. HILDEBRAND: And the users, too.  
10 MR. HESSELTINE: Excuse me?  
11 MR. HILDEBRAND: That definition would also  
12 include riparian waters, too?  
13 MR. HESSELTINE: Yes, that's true.  
14 MR. HILDEBRAND: You really mean everybody  
15 regardless of where they take it?  
16 MR. HESSELTINE: Yes, in some way. But  
17 that's not saying that they're all going to pay the same.  
18 you know, that all is going to have to be dealt with.  
19 That's the next round of controversy.  
20 Okay. So if there's -- oh, this is the  
21 ability to pay aspect of this which comes into it. Again,  
22 we're assuming that each beneficiary is going to pay  
23 the allocated share of the full costs. In other words,  
24 there is a basic premise that somehow you have to pay for  
25 the entire program so the entire costs has to be picked up

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1 We want to make sure that we recognize  
2 people who are doing things that are consistent with or  
3 contribute to the CALFED program once it gets started, and  
4 only if they're doing things that are part of the CALFED  
5 program can they get credit, but there are also people  
6 that are already doing things and so there is a question  
7 of, "Well, we know we are doing something that is going to  
8 be part of the program so we should be getting credit for  
9 that now."  
10 So at least our recommendation to BDAC and to  
11 CALFED from the Finance Committee is that the starting  
12 date should be the date of the signing of the Accord  
13 Establishment Category Three, and the interim period is  
14 from the signing of the Accord up to the time that the  
15 CALFED program is adopted and implemented, and during that  
16 time anybody who has contributed money or actions which  
17 can be of value to the Category Three process should be  
18 eligible for crediting, and that would be the limit of any  
19 credit prior to initiation of the program.  
20 MR. BUCK: That is voluntary, not ones that  
21 are already compelled by a regulatory requirement?  
22 MR. HESSELTINE: Right. Right. Well, I  
23 don't know. We had a discussion about that. That's  
24 something that needs to be resolved. But in other words,  
25 if you're paying into something that is part of the

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1 program even if it's -- we'd have to see how that all  
2 works out. It's a good question.  
3 Byron's question, I don't know if everybody  
4 heard that, was what about people who are required by law  
5 or by other contract or whatever to, in fact, perform  
6 certain functions, whether or not that should be credible.  
7 That's -- I don't know what the answer to that is. Okay.

8 So just a -- just a moment on the actual  
9 costs allocation methods we are looking at now, I have  
10 indicated that we're are going from a very highly,  
11 complex, complicated approach to a rather broad based,  
12 almost estimated approach as a way of getting started.

13 Selection criteria I think will really be how easy  
14 it is to implement and how useful it is for this process.  
15 There's no point saying we have to stop this whole process  
16 while we go out and, you know, do a six month cost  
17 allocation calculation to tell you what it's actually  
18 going to cost everybody. I think we are going to need to  
19 be able to come to the table and when everybody sits down  
20 finally with this CALFED program to see whether or not  
21 this is really going to work and people are going to buy  
22 into it, they're going to have to know what it's going to  
23 cost them, and so we are going to have to be able to give  
24 them at least a number that can be relied upon as being  
25 close if not, you know, very close.

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1 simple and it's straight forward.

2 And then there is another one on here, too,  
3 where basically we all just sit down and say look should,  
4 should on storage how should that be split between public  
5 and private. Should it be 100 percent private? Should it  
6 be 75 percent private and 25 percent public because there  
7 are certain environmental benefits to having it. What  
8 should -- you know, what should that be? What is a  
9 reasonable number an at least agency a starting point, and  
10 do that for Water Quality, do that for the levies, do that  
11 for the ERPP, do that for the conveyance, and then work  
12 from there as to assigning the cost and beginning to break  
13 them down according to a more detailed methodology amongst  
14 the users where the benefits can be defined. The main  
15 thing here that you are trying to do by some of these  
16 techniques is to move all of the public fund that is going  
17 to be expected to be picked up by the State and Federal  
18 governments out of the equation at the start so that your  
19 back to only benefits that a you can work with.

20 So basically that is it. We have been  
21 wrestling with this for quite awhile and we have been  
22 around the same loop two or three times. Quite frankly we  
23 are anxious to get to a case study to try to apply this to  
24 see how it works, but I think before we go any further the  
25 Finance Work Group has basically asked me on their behalf

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1 And the methods again are the traditional  
2 ones such as were used for the State Water Project that  
3 separatable cost remaining benefit. There are others that  
4 have been used on other projects that are similar to that.  
5 It's a mathematical technique for determining what the  
6 fair share is for everyone. There are some new approaches  
7 that are more technical and more highly advanced in the  
8 mathematical content.

9 Follow the water, that's an idea that has  
10 been set forth and basically says, look, this Delta that  
11 we are talking about is really a management of a scarce  
12 resource problem. Water is flowing through. We're  
13 talking about amounts of water and what it does while it's  
14 there and where it's going, but in the end all of that  
15 water ends up somewhere, and for everybody who ends up as  
16 the ultimate consumer of that water, that -- the amount  
17 that they use relative to the total water that went  
18 through the Delta should be their share of the costs, and  
19 so it's -- there is a lot of ways in which we, again, have  
20 to start distinguishing between different values of water  
21 for different uses, different values of water for  
22 different times that it took and so forth, but in general  
23 the first cut is to just say, where did all of the water  
24 end up? And those are the boxes that we are now going to  
25 work with in terms of assigning costs, and it's very

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1 to ask you, BDAC, that we need some opinion and we need  
2 some direction on the idea of what the financial baseline  
3 needs to be. Is this going to be 100 percent enhancement  
4 program or is this going to be a combination of mitigation  
5 and enhancements.

6 And then number two, is the concept of a user  
7 fee, a user surcharge for those parts of the program that  
8 really can't be quantified, is that a reasonable approach?  
9 Is that a reason way to do it, or is it the assumption  
10 and the recommendation of BDAC that all such costs of that  
11 will be public and that that's not something that we need  
12 to worry about.

13 MR. MADIGAN: Okay. Thank you, Eric. I'm  
14 going to ask that questions be held and I want to put this  
15 on as a discussion item for the next BDAC meeting and  
16 maybe you could summarize some of these things and get it  
17 out to some of the members of BDAC so that we have this  
18 information.

19 Thank you, Eric. Thank you, Zack.

20 All right. We are going to go back to the  
21 Phase II report on major issues. There is some time  
22 constraints on some people who have been waiting patiently  
23 since this morning to deal with this issue, and I am going  
24 to start out with -- there he is now -- Lester Snow.

25 Lester, you're on.

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1 MR. SNOW: I'm going to do this in a fairly  
2 abbreviated fashion because there is a couple of key  
3 issues that came up at our last meeting that are fairly  
4 important as we get ready to roll this document out.  
5 To set the context I want to talk a little  
6 bit about the Phase II report. We discussed it very  
7 briefly this morning. I think Ann Notthoff pointed out  
8 that we really need to have a document that is user  
9 friendly, and to some extent we talked about the Phase II  
10 report as being the owners manual for this EIR/EIS that we  
11 are coming out with, and to really try to walk through and  
12 as lay terms as possible what CALFED all about and how we  
13 got to where we are, what the decisions are and perhaps  
14 just as important talk about how we're going to get from  
15 where we are to where we need to be. I was going to walk  
16 through the outline of your packet. You can just kind of  
17 take a look at that. I am going to make a few comments  
18 about it, though.  
19 It's real important not only that we explain  
20 what we think is going on in CALFED and what our analysis  
21 is, but we are going to have kind of adopted convention, a  
22 formatting convention where we are going to have sidebar  
23 discussions of that so that the public when they read  
24 this, they're not going to get a sales job, their going to  
25 get, "Here is what we think works about this and make sure

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1 that we are clear what some of the issues and concerns are  
2 and that will be kind of a general approach, and then just  
3 kind of a general, a place where we are integrating  
4 concerns into the text and I'll get to that.  
5 I do want to point out that in chapter two if  
6 you look at that that really is where we lay out this  
7 rather this remember complex resource management strategy  
8 and water management strategy that we talked about this  
9 morning, how these pieces fit together.  
10 Move onto describing the program elements and  
11 how they fit together and go on from there into the  
12 alternatives, and then in chapter five talk about these  
13 refined alternatives that we discussed with you at the  
14 December meeting. And actually when you look at five and  
15 six, that goes back to this issue.  
16 Where chapter five to a large extent is a  
17 second bullet, where we really want to go through  
18 particularly the three refined alternatives, talk about  
19 the strengths and weakness of them that we discussed last  
20 time, what works, what doesn't work, what some of the key  
21 issues are, then move into chapter six where we are  
22 identifying, as we discussed last time, the dual system  
23 was providing certain technical advantages but it has some  
24 real major issues associated with it.  
25 To go on and explain those kinds of things in

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1 significant detail so people understand exactly what's  
2 going on, here you have these technical performance  
3 issues, but you've have got a lot of other kinds of  
4 issues. We identified it at the last meeting as assurance  
5 problems, and Dan kind of punctuated that a little bit  
6 more clearly and specifically on some of the issues  
7 associated with a dual system.  
8 What we want is to get into now is a couple  
9 of issues of why even consider some of these things. We  
10 know some of the problems. I like the image that Dan set  
11 up of pushing an elephant up a mountain, and if you think  
12 about it, if you're the person leaning against the back  
13 side of that elephant pushing him up there, a lot of bad  
14 things can happen to you. Okay. So why would you even  
15 entertain doing that?  
16 That's what we need to make sure that we've  
17 got clearly articulated, and then you can make the public  
18 policy call of how you proceed with it, and as we  
19 discussed the last time there's two issues that kind of  
20 came up as major considerations: Water quality,  
21 specifically drinking water and specifically bromides; and  
22 the second issue was fish entrainment, and so we thought  
23 that we would give you a little bit more of those  
24 discussion of those items as we are going to drop them  
25 into this report so you have a feel for what we are going

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1 to share with the public, how we're going to couch it so  
2 that we can get a good discussion of these issues.  
3 So I want to start first with water quality  
4 and drinking water. Start with Rick, and I think we have  
5 a couple of people that want to address the water quality  
6 part.  
7 MR. WOODARD: Rick Woodard. I'd like to  
8 maybe be the first to go on record and withdrawing my name  
9 from the list for Czar or Czarina.  
10 MR. MADIGAN: Rich, you are not first, you  
11 should know.  
12 MR. WOODARD: I need to move through this  
13 fairly quickly because I do have some other people who I  
14 think would be able to contribute substantially to this  
15 discussion and I would argue, too, that this isn't the  
16 last time that we will talk about this.  
17 You will find in your packet a discussion of  
18 drinking water implementations of the CALFED decision, and  
19 that's really pretty much what w're talking about here.  
20 About two-thirds of the State's population drinks water  
21 that comes from the Delta, so obviously it's an important  
22 issue.  
23 The Delta has some problems. It's relatively  
24 unprotected in the sense that you can get influenced from  
25 pesticides, agricultural chemicals, household chemicals

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1 from waste water treatment plants. The whole plethora.

2 Bromides that come as part of the salinity  
3 that gets into the Delta through sea waters is important.  
4 Likewise to potentially a lesser organic carbon that comes  
5 in from various sources including from discharges from  
6 Delta Island is certainly a significant consideration.  
7 Excuse me. The Pete islands in the Delta are thought to  
8 be a significant source of their own of the organic  
9 carbon. The bromide and TOC react with the disinfectant  
10 chemicals that you use in drinking water to produce  
11 disinfection byproducts that are unwanted and are  
12 potentially harmful.

13 So involved in this decision as it needs to  
14 be consideration of fact that the municipalities that use  
15 Delta water are at something of a disadvantage relative to  
16 meeting current and especially upcoming proposed drinking  
17 water regulations. About 95 percent of the country has  
18 their drinking water supplies containing lower  
19 concentrations of bromides. That is the case for the  
20 Delta supply, and as we'll see more and I think we will  
21 hear some further elaboration, that is a very major issue  
22 with the Delta.

23 I'm going to expand on this a little bit.  
24 What we are trying to do with the drinking water is to  
25 disinfect to be disinfected sufficiently to be sure that

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1 there really isn't any way to reduce bromide through the  
2 regular treatment process. So that means, then, that the  
3 effect -- that the CALFED decision itself has a major  
4 impact on what the bromide decision is going to be.

5 Now, as I've said earlier, we have  
6 disinfection byproducts being produced. There are  
7 actually there is a range of them, some of which have been  
8 studied for health effects, there are others that are  
9 coming to the attention of the drinking water regulators  
10 as being potentially having health effects. There is a  
11 continuing evolvement of drinking water regulations and of  
12 studies to support them and I think we'll have some some  
13 folks tell us more about that in a minute.

14 There really two kinds of health effects that  
15 we're looking at that are related to the Delta and the  
16 disinfection byproducts, one being long-term, primarily  
17 cancer, that would be would increase the cancer risk over  
18 a lifetime of exposure. There are more current studies  
19 underway and ongoing that indicate some potential for a  
20 more acute health concerns associated with these  
21 chemicals. So we are concerned with trying to manage  
22 these levels at certainly it would be desirable, all  
23 things being equal, to have as little of these materials  
24 in there as possible.

25 So this I think you may have seen before does

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1 it's of agents that make people sick. At the same time we  
2 are trying to suppress formation of the harmful  
3 disinfection byproducts that will occur as a result  
4 disinfection.

5 We have sort of a diagram here I think that  
6 tries to illustrate that there's a need for balance the  
7 need for adequate disinfection against the need to  
8 effectively prevent formation of these byproducts, and as  
9 you see, treatment is the balancing issue essentially.

10 So what are the key constituents. Again,  
11 organic carbon is definitely important. Certainly the  
12 more organic carbon can be reduced in the Delta the lesser  
13 problems drinking water treatment facilities are going to  
14 have in treating the water effectively and meeting those  
15 standards, but it's also true that organic carbon is  
16 subject to being removed to some extent through the  
17 treatment processing. There are several possibilities for  
18 reducing organic carbon concentrations though they are not  
19 completely effective either but certainly there is  
20 something that can be done about it in the treatment  
21 process.

22 Bromide on the other hand presents a  
23 different sets of problems. There really isn't, except by  
24 use of the most advanced types of technologies which also  
25 the most expensive and are not necessarily fully proved,

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1 present an indication of what bromide might result from  
2 the choice among alternatives. The first one being the  
3 existing conditions, not ex-con as has been suggested  
4 earlier; the no action, the alternatives one, two and  
5 three being essentially the current situation with some  
6 improvements; the through Delta alternative and the  
7 isolated conveyance alternative. As one can see there are  
8 some rather strikingly differences in the bromide  
9 concentrations that would be in export waters as a result  
10 of selection of those alternatives.

11 As I mentioned earlier in the discussion, the  
12 Delta is higher in bromides than about 95 percent of the  
13 nation's sources water on average. That average is about  
14 40. As you see that falls quite low compared to what we  
15 experience currently in the Delta, and what would be  
16 achievable with an isolated facility gets us down into  
17 that range, and I should by the way mention that what  
18 we're looking at here are the error bars around the  
19 estimate.

20 In other words, it would fall -- the \*\*  
21 correct numbers should be between there and there,  
22 between those two bars. So it gives you some idea of the  
23 fact that there is a major difference in the bromide  
24 concentrations that will be realizable through these  
25 alternatives.

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1 Now, the \$64 -- and we know that. We are  
2 quite sure that the numbers are going to look something  
3 like that. The real question then is so what should the  
4 significance of that be to the CALFED decision process.  
5 It's clear that this has some importance and I don't think  
6 that we are yet able to know just how important it ought  
7 to be as balanced among all the other factors that have to  
8 be considered.

9 So to try to approach that we have some  
10 ideas, and one would be that intend tends to try to  
11 consult with the people who have regulatory  
12 responsibilities and expertise on this topic. We will be  
13 speaking with the drinking water agencies such as the ones  
14 that Byron represents who are the ones who have to meet  
15 these regulations and have to be concerned about the  
16 safety of the drinking water supplied to folks. Likewise,  
17 the Department of Health Services which has responsibility  
18 for enforcing the Safe Drinking Water Act in California  
19 and are certainly on the line, and last but not least at  
20 all is the Environmental Protection Agency who are the  
21 regulation setters and also are involved in every phase of  
22 this analysis.

23 So the other thing that we are intending to  
24 do in the near future is put together some sort of a  
25 science review panel, an advisement body of experts to try

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1 understanding this issue is understanding how you can  
2 manage this level from a public health standpoint because  
3 are seeing an improvement with Alternative Two, additional  
4 improvement with Alternative Three. So it's important  
5 that we start understanding the significance of those  
6 differences, how important is it, so how much do you want  
7 to push an issue because of this differential; but then  
8 second, if you make determinations for other reasons that  
9 you can't achieve this improvement, how are you going to  
10 manage this level? What implications does that have for  
11 the community? So I think that that is important how this  
12 plays out over the next few months, and why it is  
13 important to get a lot more science review on in so this  
14 doesn't appear as some sort of stocking horse in any way,  
15 but just get the information out for the people to  
16 discuss.

17 MR. WOODARD: To expand just little bit,  
18 again, this is something that cannot be accommodated  
19 through the common programs that would otherwise control,  
20 help us to control a number of other sorts of things; but  
21 this, this is essentially fundamental to the choice among  
22 alternatives itself.

23 So Byron, would you introduce whomever it is  
24 that you want to speak.

25 MR. BUCK: Yeah. By way of introduction,

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1 to help us evaluate some of the characteristics that  
2 we analyzed and to try to help us reach some judgment,  
3 provide some guidance to us in terms of how this factor  
4 ought to be considered in the overall decision-making  
5 process.

6 So that's really all I want to be able to  
7 say. Unless there are some questions, I would like to  
8 invite perhaps the Representatives of the Urban Water  
9 Agencies to say a peice.

10 MR. MADIGAN: Byron.

11 MR. SNOW: Thank you. If I could just make  
12 one quick point.

13 MR. WOODARD: Oh, no.

14 MR. SNOW: There's a lot of ways to look at  
15 what's happening in this discussion and the kind of debate  
16 that we want to see take place. In trying to understand  
17 the difference between these two, how significant of an  
18 issue is that?

19 I mean it's understanding that that makes you  
20 start asking the question to keep playing off of Dan's  
21 analogy, but how big is the elephant and how tall is the  
22 mountain? I mean you want to understand that; but by the  
23 same token if you make a determination that you can't just  
24 do this alternative, and we've all talked about that, how  
25 you can do this, then the other importance of

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1 there's three things that the Urban Water agencies who  
2 take water from the Delta and have treat it for public use  
3 are really concerned with in the CALFED program, and it's  
4 becoming more accute daily, and the three things are water  
5 quality, water quality and water quality.

6 We really are starting to look at the supply  
7 aspects of the program to be much reduced in terms of  
8 their importance, in terms of what we see in the ability  
9 to meet public health standards and the costs and  
10 technologies we would have to use to meet those public  
11 health standards. The reason this world is changing for  
12 us is because of the Safe Drinking Water amendments which  
13 are moving towards a progressively more restrictive  
14 treatment environment for urban water purveyors to protect  
15 public health based upon the things we're finding out  
16 about drinking water and the effects of disinfection  
17 byproducts that have on both the sensitive populations and  
18 on the general public.

19 Where real concerned going into the CALFED  
20 program as to where the drinking water regulations might  
21 go that might implicate our ability to meet standards in  
22 the future, and how did Delta Source Water Quality play  
23 into that arena. We grappled with this amongst all of the  
24 experts within the California water agencies who do water  
25 treatment and decided that we really needed an outside

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1 look to get a handle on this, and particularly an outside  
2 look from experts who are involved in both advanced  
3 treatment technologies and involved in the regulatory  
4 process that is driven by the Safe Drinking Water Act  
5 which is unfolding as we speak. Nobody knows exactly  
6 where the regulations are going to go. It is a regulatory  
7 negotiation process so to some degree we are speaking in  
8 the abstract, that the implications aren't going to  
9 actually be known because the regulations evolve over  
10 time.

11 So we decided to hire this expert panel to go  
12 independently and look at what is going on with the Safe  
13 Drinking Water Act, what might happen with regulations,  
14 what are reasonable scenarios in the future and what would  
15 that mean in terms of the Delta Source Water Quality we  
16 would need to have to meet those standards with  
17 reasonably available technology.

18 We did a first stage report well over a year  
19 ago now that's been in circulation as a draft and we have  
20 got lots of comments on it, and one of the comments we got  
21 from EPA was that's possibly a reasonable scenario;  
22 however, there are lots of different ways that the  
23 regulations can come down and they would like to see a  
24 little more of a range of analysis, more sensitive  
25 analysis of if the regulations were in different places,

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1 had some discussion from Mr. Woodard in talking about the  
2 importance of the issues. I'll emphasize bits and pieces  
3 of that before I get down to the issue of what j1 -- how  
4 does this -- how do the treatment and how do the source  
5 water quality aspects that are important to all of you  
6 here fit into the whole drinking water picture.

7 One of the questions that -- I'm standing up here  
8 not as myself but as a representative of a group of people  
9 who are involved in this. I am Doug Owens and was the  
10 chair of the panel, and the reason, as Byron explained,  
11 that I was brought on is that for the last five or six  
12 years I've have been providing technical support to EPA  
13 and the drinking water agencies as they have developed  
14 these regulations that are very pertinent to the source  
15 water quality needs here for you.

16 Phillipe Daniel who is with the consulting  
17 firm Camp, Dresser and McGee also assisted me. He's been  
18 involved in some of those discussions as well, and  
19 importantly Phillipe has been involved in some of the Risk  
20 Management discussions that have been going on with EPA.  
21 In other words, how do we balance benefit and cost and  
22 make reasonable societal decisions.

23 And Scott Summers was the third member of  
24 that group, and Scott is a Professor at the University of  
25 Cincinnati, and he was involved with providing technical

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1 what would that imply as well because that is really the  
2 public policy decision for CALFED is to know what that  
3 range is and to know what the implications are.

4 So we've gone and done that or we are working  
5 on that now. And I'm going to have Doug Owens of Malcolm  
6 Perney [ph.], who is the head of the expert panel go  
7 through where we are with that now and give you a flavor  
8 for how different regulatory scenarios affect water  
9 quality and affect types of treatment technologies we  
10 would have to use, and what are the implications of them  
11 in terms of our ability to protect public health.

12 But before I turn it over to Doug, the real  
13 issue here is we have got a long-term program here that's  
14 supposed to be durable over at least thirty, forty,  
15 perhaps fifty years. We ought to make sure that long-term  
16 program also takes a long-term view in terms of the  
17 interest of public health, and how can we best protect  
18 that long-term interest from things that we are liking to  
19 find out are in our drinking water based on what we do for  
20 disinfection in the future.

21 Doug.

22 MR. OWENS: Thank you, Byron, and thank you for  
23 having me here today to speak with you.

24 We got quite a bit of introduction here from Byron  
25 about what the charge of the expert panel was. We also

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1 support during this whole regulatory negotiation process  
2 that Byron spoke to earlier over the last five years for  
3 the important drinking water regulations, and he provided  
4 technical support during that negotiation process to the  
5 Environmental Defense Fund and the Natural Resource  
6 Defense Counsel.

7 So we felt like this provided a very nice,  
8 balanced committee in order to move forward, and what I'll  
9 be showing you today is the consensus opinion of these  
10 three and of the three of us here relative to what is  
11 important to you; and what is important to you is this:  
12 Which is what are the source water quality needs from an  
13 aspect of drinking water as we have evaluated it.

14 And the way that we got out at that is we  
15 looked at what are the potential short and long-term  
16 regulatory scenarios. We have some ideas about what these  
17 may be, and we came up with plausible scenarios for those,  
18 and then we looked at different applicable technologies  
19 the drinking water systems would use in order to meet  
20 these types of regulatory requirements; and based upon the  
21 efficiency and the feasibility of these technologies to  
22 get to these particular levels, we defined certain levels  
23 in the source water that would have to be provided to  
24 allow those technologies to meet those regulatory  
25 outcomes. So we kind of started at the back end and then

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1 looked at the treatment and went back up into the source  
2 water.  
3 Now, Rick started to speak that there are some  
4 important regulatory criteria and the big balance that we  
5 are dealing with right now is providing disinfection,  
6 microbiological control, while at the same time when you  
7 disinfect you form these byproducts. These have acute  
8 effects. These primarily have long-term effects such as a  
9 cancer end point.

10 You may recognize some of these organisms.  
11 Cryptosporidium, for example, was the organism responsible  
12 for the outbreak in Milwaukee in 1993 that has been in the  
13 press quite a bit and is of great interest and is a  
14 regulatory target, and right now nitrohalomethanes is  
15 currently regulated but the new regulations coming in,  
16 both short-term and long-term will be setting national  
17 incontinent levels for other important byproducts, and  
18 you'll hear quite a bit here about bromate because that is  
19 particularly relevant to the issue of what is the  
20 allowable bromide concentration in the source water when  
21 you're using a disinfectant, a strong disinfectant such as  
22 ozone which can inactivate these types of organisms.

23 Now, I keep alluding to these regulations.  
24 The two major regulations that prompted the EPA's Rule  
25 Manager in '92 to call this "The Mother of all Drinking

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1 So given that context what are we worried  
2 about? What kind of constituents in the source water in  
3 the Delta are we concerned about, and Rick started to  
4 allude to that, and the two are total organic carbon, and  
5 the reason that total organic carbon is important is  
6 because when you disinfect it, particularly with chlorine,  
7 you form trihalomethanes and haloacetic acids and those  
8 are going to be -- this one is regulated, this one will be  
9 regulated.

10 And bromide is important because it also  
11 affects the formation makes of these disinfectants but it  
12 very significantly impacts the formation of bromide. When  
13 you ozonate water with bromide you get bromate, and the  
14 reason that that's is very important is that ozone's the  
15 best, one of the strongest disinfectants that we have and  
16 one of the only ones that will inactivate cryptosporidium  
17 so that becomes a very important issue for us.

18 Now, if you want to think -- EPA is going to be  
19 struggling with all of these things, and they are going to  
20 be trying to decide on a national level how to balance,  
21 how much inactivation they require for microbio control  
22 with the byproducts, and they'll be looking at data from  
23 across the United States, and the reason that I bring this  
24 up is this cumulative probability plots which goes from  
25 zero to 100 percent versus a bromide concentration for all

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1 "Water Regulations" is the Enhanced Surface Water Treatment  
2 Rule which affects the microbio control; in other words,  
3 what type of surface water treatment do we have to provide  
4 to get our bottom-line disinfection that is satisfactory,  
5 and then the Disinfectant Disinfections Byproducts Rule.

6 As you see, both of these are coming in two  
7 stages, essentially. Stage One and Stage Two termed term  
8 for the DDP Rule, and an interim and then a long-term  
9 enhanced surface water treatment rule.

10 Now, the dates that I put down, these are the  
11 dates when the regulations become final and they go into  
12 law, and then there's a period of time over which  
13 utilities have to comply before they are effective and  
14 they can be -- and levies can be fined and such. Now, the  
15 November '98 is pretty solid and everyone is moving in  
16 that direction. This dates in May of 2002 is floating.  
17 It could move up, supposedly. It also could drift back,  
18 which is probably a more feasible scenerio, but the  
19 purpose of putting this up is to give you an idea that  
20 it's really the long-term and the Stage Two regulations  
21 here that ultimately might -- would be most relevant to  
22 the overall solution that you're dealing with here at the  
23 table. Those kinds of regulations will be real and will  
24 impact the ultimate solution that your group comes up  
25 with. So we want to think about what those might be.

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1 the waters in the United States or the ones that were  
2 sampled here, which was a representative group.

3 So in other words, about 50 percent of the  
4 waters in the United States have a value of about 40  
5 micrograms per liter or less. You know, 90 percent of  
6 them are about 100 micrograms per liter or less. That  
7 gives you an idea about where the national waters are and  
8 where EPA, what kind of data they'll will be using when  
9 they're attempting to make their decisions.

10 If you look at where things are here in the  
11 Delta, the 50 percent value, in other words, 50 percent of  
12 the waters have concentrations less than or greater than  
13 that value, it's about 250 micrograms per acre. That's  
14 five times larger than the number on the national average;  
15 and so I just want to put that in a perspective that, as  
16 Rick started to point out, that this is unique here. We  
17 have a water here that has a very high amount of bromide  
18 compared to the national occurrence of bromide, and that's  
19 why it's so important from the drinking water community's  
20 perspective.

21 Bromide not only affect the bromate  
22 formation, it also affects formation of trihalomethanes  
23 which is currently regulated right now at 100 micrograms  
24 per liter, and these are just a series of different  
25 samples above the Delta and below the Delta, and the red

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1 line just shows the bromide concentration, and you can see  
2 as the bromide concentration is much higher in this group  
3 you have much higher THM's.

4 So while in this analysis that I'll be  
5 summarizing here, bromide is very important from the  
6 bromate formation, it also affects the other organic  
7 byproducts such as THM's. So that's the background.

8 What treatment do we look at? We looked  
9 initially at two different types of treatments and based  
10 on comments that we received in EPA we looked at two more.  
11 We looked at something called enhanced coagulation.  
12 That's basically taking a conventional process which  
13 currently uses coagulation and improving it by adding an  
14 additional amount of coagulant chemicals. And what does  
15 it do? It removes more of the TOC and it reduces those  
16 organic DBT's like trihalomethanes and haloacidic acids.

17 We looked at ozone. Ozone is a very strong  
18 disinfectant, the strongest we know for inactivating  
19 pathogens, one of the only ones that's successful with  
20 cryptosporidium. Pre-chlorine will not inactivate  
21 cryptosporidium. So I mean -- so ozone is going to be a  
22 very key technology considered in the next wave of  
23 regulations.

24 Ozone together with another secondary  
25 disinfectant out in the distribution systems, chloramines

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1 chemical, you have issues where you have to ship and store  
2 more chemicals, you produce more sludge that you have to  
3 dispose of. As you can see it runs in this range of 15 to  
4 \$35 an acre foot.

5 We go to ozone. You use a lot more energy.  
6 You generate it right on-site. It's a high-energy  
7 intensive process, and its price is, you know, one and a  
8 half to two times what coagulation is.

9 Going to granular activated carbon, you have  
10 a much larger jump in the overall cost on a dollar per  
11 acre foot basis and you have to thermally regenerate this  
12 stuff. When it gets spent you have to use something akin  
13 to an incinerator to reactivate it, and citing those types  
14 of things for a large facility is difficult.

15 And finally membranes is the most expensive,  
16 as you can see. An order of magnitude more in overall  
17 dollars per acre foot than these technologies, it has a  
18 higher energy usage, and concentrate disposal is really  
19 important. You're physically rejecting things. You have  
20 a very concentrated solution you have left and you have to  
21 decide what you can do with it. There aren't a lot of  
22 options on where to dispose of that, and that ultimately  
23 can affect the feasibility of even being able to use that  
24 technology. So all of those things are site-specific.

25 So given all that layout, what we did is we

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1 also will reduce THM's and HAA's, but the kicker with  
2 ozone is when you add it to a water bromide and you get  
3 bromate, and the question is how much do you form and how  
4 does that fit into your overall plan.

5 We also looked at other what are considered  
6 advance technologies, granular activated carbon. That's  
7 more effective than coagulation at removing TOC and remove  
8 remove a lot of total organic carbon so that you can  
9 reduce your organic byproducts even more.

10 And then finally we looked at membranes.  
11 These are actually softening membranes similar to reverse  
12 osmosis, high pressure membranes, which would remove total  
13 organic carbon in the water and basically could  
14 dramatically reduce the organic byproducts, the potential  
15 to form bromate and the membranes themselves will remove  
16 pathogens as well. I mean just physical as a barrier.

17 So that's kind of the technology that can do  
18 a lot of things for us, but of course there are issues  
19 with that, and the issues are summarized on this graph.  
20 What I have put down here is the four different  
21 technologies that I just listed with the general cost, and  
22 I call this an incremental costs. This is a cost beyond  
23 whatever existing treatment is there, in dollars per acre  
24 foot, and then what the issues are with that technology.

25 If you increase the amount of coagulant

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1 defined a -- there's a lot of different graphs here, I'm  
2 only going to show a couple, and I can entertain questions  
3 and you will see a report that will summarize this. But  
4 what we did is we defined a plausible regulatory scenario  
5 in the future based on the expert panel's experience with  
6 where the regulations were going, and then we said, what  
7 kind of technologies would be required for different types  
8 of source water quality. So, and then we generated a  
9 compliance forecast. And that is what I am going to show  
10 here I'm going to explain how these are put together.

11 Now, this is a plausible future regulatory  
12 scenario where trihalomethanes are regulated at 40  
13 micrograms per liter HAA 5 at 30 bromate at 5. And for  
14 the Enhanced Surface Water Treatment Rule we're saying you  
15 have to provide -- you have to inactivate through some  
16 type of disinfection one log -- this is like log at the  
17 base tank, 90 percent removal of GREA, and what we plotted  
18 here is source water bromide and source water TOC and then  
19 said what type of technologies would you use to get to  
20 this regular scenario.

21 So what we say here is that, well if your TOC  
22 is very low, if your down here below 3 million grams per  
23 liter, around this range -- by the way Delta water kind of  
24 fits in this range right around here for now, you can use  
25 enhanced coagulation or you can use granular activated

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1 carbon to get at this overall scenerio.

2 If your bromide decreases enough, you can use  
3 ozone as long as the Ph. is low, 6.5, and then if you have  
4 very high bromide or very high TOC you're way up in this  
5 corner.

6 What I wanted to show is as you increasingly  
7 have to provide more disinfection, watch how this moves.  
8 We go from this, now we have to provide instead of one log  
9 we have to provide two log. We are starting to come down,  
10 squeeze available technologies, use more membranes,  
11 granular activated carbon enhanced coagulation has less  
12 impact, and if you have to go to cryptosporidium  
13 inactivation in this kind of regulatory scenerio GAC GAY  
14 enhanced coagulation disappear and basically you're way  
15 over here in the bromide area with ozone, only if you can  
16 use less than -- if your resource water is less than 50  
17 micrograms per liter.

18 We've looked at a lot of regulatory impacts.  
19 I have two more slides. We have a lot of regulatory  
20 impacts looking at potential plausible outcomes. There is  
21 some that it's very difficulty for us to evaluate but we  
22 can just tell you the general tendencies. One is if there  
23 turn out to be maximum contaminant levels for individual  
24 DVP's, that means that systems in general will have to use  
25 less chlorine, they will be forced to use more ozone, and

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1 with saying if we want to leave all these technologies  
2 available for systems to be able to use, drinking water  
3 systems, we have to have bromide with 50 micrograms per  
4 liter range and we have to have TOC amount of 3 milligrams  
5 per liter or less. That's is the bottom line from a host  
6 of different drinking water -- from the drinking water  
7 perspective from our expert panel.

8 I don't know how you want to handle questions  
9 here, Byron, or how you want to move through that. There  
10 will be a report that we will be --

11 MR. MADIGAN: Can we get copies of this?

12 MR. OWENS: Yes, in fact there are copies we will  
13 get to the staff.

14 MR. MADIGAN: All right. Thank you very much. I  
15 would like to hold questions until everybody has had a  
16 chance to get this and take a look at this. Thank you,  
17 sir, very much for your presentation.

18 Byron, did you want to put a wrap on it?

19 MR. BUCK: Again, just to re-emphasize the point  
20 we've got a long-term planning issue. Some of the  
21 technologies that we might be forced to if drinking water  
22 qualities --

23 Just to wrap, some of the drinking water  
24 technologies that we might have to adopt if the source  
25 water quality doesn't improve dramatically have very major

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1 that's going to mean that bromide has to be lowered  
2 significantly in source waters. If there were other  
3 end-points potentially for outcomes instead of cancer or  
4 something like, that means that we won't regulate on  
5 averages anymore, just maximum levels, and it will mean  
6 the TOC and bromide have to be lower.

7 So in summary, the two regulations that  
8 really drive this are the enhanced surface water treatment  
9 rule and the DDVP Rule. There are many water drinking  
10 water regulations, these are the ones that are driving it.

11 It's going to be -- we know that the  
12 regulations are coming in two stages, but the ones that  
13 will likely be most relevant to the decision that's made  
14 here among this group will be the ones that are in the  
15 second stage. The timing appears to be more relevant for  
16 that, so we want to take some kind of speculation on the  
17 long-term. And once you wade through -- you didn't have  
18 enough time to digest this but when the figures were in  
19 front of you, once you wade through all of the different  
20 plausible --

21 MR. MADIGAN: Actually everybody here got it.

22 MR. OWENS: Okay. Okay. I'm sorry. And you look  
23 at the different alternatives making sure because of these  
24 different feasibility issues for different technologies  
25 which ones may control or may not control, you come out

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1 cost implications plus the membrane technology in  
2 particular because of the fact that your rejecting water  
3 would increase urban water demands 25 percent if we have  
4 to go to that technology to deal with the health issues,  
5 and that in and of itself is not something that I think  
6 any of us want to see in the Bay-Delta system, an increase  
7 of 25 percent over and above what they are going to go  
8 with 12 million more people in this state.

9 MR. MADIGAN: I would like to hold all  
10 questions until next month because we have another  
11 presentation that we really need to get in right now.

12 Phil, do you want to come on up here.

13 MR. MEZGER: I don't have to have any magic  
14 incantations over this mic.

15 I appreciate the chance to come up and  
16 supplement the prior couple of presentations. I think the  
17 previous one gave one useful part of the picture, although  
18 there are some technical aspects that there are perhaps  
19 some questions about. What I would like to do is really  
20 kind of, as with a zoom lens, pull back a bit, it's been a  
21 pretty detailed view, and refocus to give the broader  
22 context of the regulatory process that will define  
23 benefits and when we can know enough to define them  
24 because what was just presented is useful. It is, as I  
25 think was stated on the last slide, a range or a set of

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1 plausible regulatory scenerios.

2 I would like to emphasize that at this point  
3 there are many, many equally plausible regulatory  
4 scenerios, and this was -- this was one of them, and I  
5 would like to give you a little sense of why that is as  
6 well that of the process that we're are going through to  
7 get that EPA, I would like to emphasize EPA and its  
8 partners in the drinking water industry and the states and  
9 environmental groups, public health groups and local  
10 governments are going, and the reason I emphasize that, we  
11 have used for the Stage One Rule and we will use for both  
12 phases of the surface water changes to the rule  
13 essentially a fact or a regulatory negotiation process in  
14 which all of the stakeholders are at the table actually  
15 participating in writing the rule, and that is -- we just  
16 put out in November of '97 a notice of data availability  
17 essentially refining the proposal on the Stage One Rule  
18 and the Interum Enhanced Rule that reflects full agreement  
19 from all of the stakeholders on the group including  
20 actually by the way Ed Means who was participating on  
21 behalf of AWWA and actually provided some studies about  
22 the nature of the problems with Delta water, Colorado  
23 River water, the combinations that were very helpful in  
24 the process.

25 Before I go into that, I would like to give

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1 protection funding is for.

2 I would also like to mention I also  
3 understand that in the common program there is a  
4 consideration for source reduction activities; in other  
5 words, source water protection activities in the Delta  
6 that could improve source water quality in the South  
7 Delta, and so the numbers that have been developed to  
8 indicate the early bars may potentially be changed  
9 somewhat by those actions, and that's an important,  
10 important area to consider.

11 Now, I'd like to focus on the rule-making processes  
12 that were referred to and give the reason why I think what  
13 Lester, and the appropriate focus here I think talking  
14 about the long-term view not just the next five, ten years  
15 but fifteen or twenty is the appropriate perspective. As  
16 this laid out there are a couple of stages of looking at  
17 disinfection byproducts and microbio contaminants.

18 When the regulatory negotiation was  
19 proceeding in the early '90's a number of utilities all  
20 across the country, not simply in California, were very  
21 concerned about where this potential Stage Two was going  
22 to lead them obviously in terms of costs, and that's been  
23 laid out.

24 Also one other factor that was critical was  
25 uncertainty about what the benefits were particularly on

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1 one small clarification that's helpful in giving a little  
2 perspective on the part of the CALFED process in the paper  
3 you gotten there was some reference in some pages of  
4 discussion to source water protection as a part of this  
5 issue. Source water protection is a major new initiative  
6 under the Safe Drinking Act amendments of 1996, and in the  
7 law and as we are working with stakeholders in another  
8 FACA group to bare any that out refers to actions to  
9 improve the quality of a source that is currently under  
10 use. It doesn't refer to finding a replacement source of  
11 water.

12 Now, finding a replacement source of better  
13 quality water may be an appropriate response in any number  
14 of situations, it simply isn't source water protection and  
15 among a number of considerations and that there is some --  
16 the option for states to use several hundred million  
17 dollars worth of funding from the State Revolving Fund  
18 which already 2 million dollars has been appropriated by  
19 Congress in the last couple of years for source water  
20 protection activities, and both Congress and the agency  
21 and the I imagine that the states would be concerned if  
22 people were considering using source water protection  
23 funding essentially to stop using one source of water  
24 rather than improving that moving to another rather than  
25 improving that source of water. That's what this source

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1 the disinfection byproducts side where the estimates of  
2 excess cancer cases per year range from zero to 10,000,  
3 and obviously the benefits you get from any level of risk  
4 reduction with that range of uncertainty is just  
5 impossible to clarify.

6 Also on the cost aspect I would just point  
7 out one thing, that the standard-setting process does  
8 involve, as was mentiond, feasible technology which has a  
9 meaning in the Safe Drinking Water Act that it is widely  
10 available as the technologies there were mentioned, but  
11 also that it be affordable for large systems. And so  
12 there is a specific cost consideration in the  
13 standard-setting process, and I raise that simply because  
14 first it puts into context some of the costs concerns, but  
15 secondly a couple of the slides were seeming to refer to  
16 conditions under which TOC levels that are pretty  
17 prevalent or at or above the median in most of the country  
18 which is somewhere between three and four, it's not  
19 completely clear, could -- would seem to imply to drive  
20 pretty much the vast majority if not all water systems in  
21 the country to use GAC, and that would raise very serious  
22 problems under the affordability consideration in the law.  
23 So that's is just a question to keep in mind.

24 At any rate, because of these costs,  
25 potential costs impacts, because of the uncertainty about

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1 risks and therefore about benefits. There was an  
2 agreement back in the early of '90's to establish pretty  
3 of an unprecedented process, unprecedented in scope and  
4 depth and extent to try to deal with these uncertainties  
5 and having responsible rule-making process. It involves  
6 what is called the Information Collection Rule in which  
7 utilities all across the country and EPA with assets of  
8 surveys spend outwards of 54,000 spending upwards of 130  
9 million dollars to look at occurrences and how the  
10 treatment of these different contaminant, how the  
11 different types of source water and combinations of source  
12 water relate to the treatment processes, how effective  
13 they are or not, how the -- you know, all of the  
14 considerations and contaminants will be looked at in all  
15 of this.

16 We are also in the midsts of a five-plus  
17 year, 50 plus million dollars research process on health  
18 effects in conjunction with the American Waterworks  
19 Association Research Foundation to try to get a clearer  
20 handle on what the health risk actually is, and there's a  
21 great deal of research that's proceeding on that, and as  
22 well the regneg processes FACA process itself has a  
23 tremendous data generation and analysis component to it  
24 which I'll describe just briefly in a bit how effective  
25 that was in the Stage One process.

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1 is part of the research process we are now undergoing to  
2 look at treatment alternatives and look at the treatments  
3 now being used in the country may be combined in some ways  
4 to deal with these contaminants without getting this whole  
5 range of problems, and again that had been effective in  
6 some degree in the Stage One process.

7 So just to conclude I would like to  
8 emphasizes on the Stage Two that it really is wide open as  
9 to what contaminants it's going to deal with, what levels  
10 will be reached, what treatment options may be available  
11 to reach those levels, what the costs are going to be.

12 We will do what is necessary to improve public health  
13 protection and is feasible. Again, it's wide open as to  
14 what that will be.

15 So a guess may not even, as to what the Stage  
16 Two Rule is going to contain may not even be looking at  
17 the right parameter. We don't know that we are going to  
18 go down at all and bromide or require things on other  
19 disinfection byproducts that will have an effect on or be  
20 effected by bromide levels. We might well. I mean this  
21 is a plausible range of regulatory scenerios that were  
22 laid out, but one of many.

23 It doesn't mean, again, that CALFED  
24 distinguishing characteristics parameter focus on bromide  
25 and TOC are wrong over the long run, just that we can't

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1 So there really a very extensive range of  
2 data collections analysis going on in this, and would I  
3 also mention it wasn't I don't believe referred to in here  
4 but I know that in a number of other discussions of this  
5 over the years there's been reference to proposed numbers  
6 for the Stage Two Rule of being twice as stringent  
7 essentially, half the levels of the Stage One Rules.

8 Those really replace older levels which are  
9 for all practical purposes not that significant. The  
10 reason is that they were needed when the regneg agreement  
11 in the early '90's was voluntary to get everybody back to  
12 the table, give people an incentive to want to come back  
13 where they are not legally required to. The amendments in  
14 1996 put this process into the law and so that is plenty  
15 of reason for everyone to come back to the table. In  
16 fact, it also required that this regneg be reconvened and  
17 that the Stage Two Rule be repromulgated so what will be  
18 in the Stage Two Rule really is wide open, as well as I  
19 might mention that the roll of ozone in the future is very  
20 unclear because of the kind of disinfection byproducts  
21 that are associated with it, no one, including the  
22 environmental groups who are most active in pushing the  
23 process and EPA to engage and cryptosporidium and some of  
24 the other microbio contaminants have been particularly  
25 strongly pushing ozone because of those problems, and that

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1 get over the long one how much them be problematic for  
2 Stage Two. So there really is no shortcut to narrow the  
3 range of what the regulatory outcome is going to be, we  
4 can't cut out any major element of this data research  
5 analysis consultation process I described and have a  
6 meaningful result. So it's appropriate for a science  
7 panel really to look at the longer-term picture regarding  
8 what kind of drinking water quality needs and costs are  
9 going to -- potentially going to arise in the long run  
10 that these contaminants might be a concerned for rather  
11 than to guess at what the specific benefits numbers may be  
12 in Stage Two.

13 Now just to give a little context on how EPA  
14 has dealt with this, especially not in the past  
15 unjustified concern about meeting deadlines, I would just  
16 like to say that as of a week from Friday, a week from  
17 tomorrow there will be sixteen deadlines in the Safe  
18 Drinking Water Act Amendments that passed in '96. We'll  
19 have met every one of them with a product that has full or  
20 virtually full agreement from the full-range of  
21 stakeholders. This is a commitment that has been made  
22 and matched with some substancial resources by the  
23 administration and by Congress, and we're determined to  
24 continue on that course.

25 I would just like to mention on a couple of

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1 elements in the -- regarding the responsiveness.

2 MR. MADIGAN: Do it quickly.

3 MR. MEZGER: Do it quickly. I appreciate  
4 that.

5 The responsiveness of this process, there  
6 were a couple of aspects in which things were in the the  
7 '94 proposals for the Stage One rule were going  
8 potentially to drive some of the utilities particularly  
9 possibly met to ozone, and we recognize those concerns and  
10 essentially first found, in one of the areas found a place  
11 to recognize a local variety of source water conditions to  
12 change what was a one size fits all approach; and  
13 secondly, to change and in terms of what is called  
14 predisinfection to recognize that the assumptions we were  
15 making about how that works in the disinfection process  
16 were wrong and they didn't have the effect we thought they  
17 had.

18 So the responsiveness of the process to these  
19 concerns is real. I would just like to conclude that the  
20 think the long-run view is right. There are a number of  
21 microbio contaminants that are on the contaminants list  
22 that we are required to look at that may be regulated over  
23 the next ten to fifteen years, and given the potential for  
24 treatment processes to be disrupted by relatively small  
25 changes, it's appropriate to consider whether what you

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1 certainly was evidenced to us that this is going to be --  
2 we're going to these water agencies in a real bind  
3 ultimately with the new regulations, and this is their  
4 opportunity to try and deal with that for the long-term  
5 future.

6 Now, that was based on a regulatory scenerio  
7 which had been worked out with some great effort. It's  
8 not the regulatory scenerio that we may end up with, but  
9 it's certainly a possibility and it's possible that cannot  
10 be met without very extensive control of TOC, bromides or  
11 very extraordinary water treatment. So it's going to be  
12 challenging to predict the way the regulation are going to  
13 go and to come up with approaches that are going enable  
14 water utilities in California to comply with these  
15 regulations and we're going to devote an effort, whatever  
16 is necessary to work with Rick to help support this  
17 process in answering some of those questions.

18 We are also developing within the Department  
19 of Health Services Resource Water Assessment and  
20 Protection Program which will be funded with the Drinking  
21 Water State Revolving Fund, as was mentioned, and we're  
22 going to work to coordinate that program with the efforts  
23 of this organization. Thank you very much.

24 MR. MADIGAN: Thank you very much. I  
25 appreciate you being here today.

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1 might call an adaptive management approach to drinking  
2 water quality might be the appropriate one in which small  
3 steps to be taken are taken initially and then  
4 consideration as greater information is developed over  
5 time as to what the needs are is given to broader steps as  
6 and if and when needed. So I appreciate the chance to lay  
7 that out.

8 MR. MADIGAN: Thank you very much, and I  
9 appreciate your patience in waiting here.

10 Can we take one or two real quick questions.

11 Rick, do you want to introduce Bob Hodgkiss  
12 first. Thank you.

13 THE COURT: Thank you very much. As you've heard,  
14 the Drinking Water Regulations are going to be changing.  
15 California Department of Health Services will adopt the  
16 national regulation when it's been adopted. It's going to  
17 be very difficult clearly to us as far as we're concerned  
18 for water utilities using Delta water to be able to meet  
19 anticipated requirements for increasing control of  
20 micro-organisms through disinfection and achieve  
21 disinfection byproduct levels that are in many cases much  
22 lower than what is now in distribution systems.

23 Urban water agencies have done an am analysis  
24 which you saw. We reviewed the preliminary analysis and  
25 thought the approach and assumptions were reasonable and

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1 I will take a couple of questions if they are  
2 really important now. And Sunne, you have one.

3 MS. McPEAK: Can the Department of Health  
4 Services provide us with an assessment of what are the  
5 relative health risks, public health risks in California  
6 so that we can put this in perspective to all of the other  
7 risks that society is asked to invest in.

8 MR. MEZGER: We can -- we are certainly able  
9 to put it in perspective of the other risks that we  
10 regulate in the Department of Health Services. Many of  
11 them we don't, we don't have any information on but  
12 drinking water as opposed to other risks that come from  
13 drinking water, air, that sort of thing, food, we could  
14 do.

15 MS. McPEAK: That would be important, it  
16 would be important to put in the context of everything  
17 else, too, but we are trying to deal with -- I always try  
18 to figure out what we really should be doing in society or  
19 interested in public health or where to put the dollars.

20 MR. MEZGER: Yes. No, we can help that. We  
21 can't perhaps provide you with very much on what all the  
22 other risks that the public is exposed to in their lives.

23 MR. MADIGAN: Okay. Thank you.

24 Byron.

25 MR. BUCK: Just a brief question for Phil.

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1 You mentioned the roll of source water quality and that  
2 that should be emphasized in the program which we  
3 certainly agree a lot of different reasons but given  
4 bromide is really the issue that we have identify here,  
5 and bromide is a constituent of sea water, a natural  
6 constituent just as it exists in the system because we are  
7 dealing with an entire estuary. How do you see upstream  
8 source water quality control dealing with the bromide  
9 issue?

10 MR. MEZGER: Well, it's not necessarily the  
11 bromide, and what we have seen from the presentations, the  
12 case is not really necessarily bromide alone but bromide  
13 in conjunction with other things going on in the treatment  
14 process. So for example, the graph there basically  
15 plotted TOC against bromide and so the source protection  
16 activities that might affect one of those parameters would  
17 occur in the area of TOC rather than bromide, but that  
18 doesn't mean that it doesn't -- it doesn't reduce the risk  
19 of having an unfavorable regulatory outcome if it's not --  
20 if it's not protected against.

21 MR. BUCK: But you would agree you really  
22 can't control bromide with upstream source control  
23 measures.

24 MR. MEZGER: Well, unless you talk about  
25 diversions basically, potentially, but not from the

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1 years. So the model that we looked at says that you just  
2 can't do it without outflow.

3 MR. MEZGER: I guess the more germane point  
4 that is unclear at this point, how critical bromite will  
5 be as a parameter of concern in the future. We have  
6 received every indication that utilities in the state as  
7 well as nationally will be able to meet the bromade  
8 standards in the Stage One Rule. Obviously we are talking  
9 about a longer term.

10 MR. MADIGAN: Alex, Rosemary and then Bob  
11 Raab.

12 MR. HILDEBRAND: I know that you don't want  
13 much discussion at this time but I would just like to  
14 leave this thought that the Peripheral Canal is not the  
15 only way to reduce the TLC and bromides in the export  
16 water. We'll have to discuss that next month.

17 MR. MADIGAN: Thank you.  
18 Rosemary.

19 MS. BORGONOVO: I know that we are going to  
20 discuss THIS next month but one of the things that I would  
21 like to see come back is that you mentioned that only  
22 places holder dear levels were done for Stage Two, and you  
23 have also told us today that EPA has been very good about  
24 meeting deadlines, timelines. I'M wondering what's going  
25 to happen in 2002 in terms of when we have to meet a

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1 standpoint of pollutants, except I understand there is  
2 some recycling going on. I don't know what potentially  
3 might be done in that area but that is potentially under  
4 consideration, I guess.

5 MR. MADIGAN: Ann, Roberta and keep it quick,  
6 Roberta, Alex.

7 MS. BORGONOVO: Phil may have answered my  
8 question and that is if you increase fresh water inflow,  
9 does that move the bromide further out, the sea water  
10 intrusion further out so that you lessen the bromite.

11 MR. MEZGER: I would like to defer to Bruce.  
12 Bruce, do you have anything on that?

13 MR. BRUCE: The question was regarding sea  
14 water, whether additional flows could be effective in  
15 reducing bromide intrusion from sea water.

16 MS. BORGONOVO: If you destroyed the sea  
17 water obtrusion by having increased flows, certainly then  
18 there would be lower bromite levels at the intakes, so  
19 yes, that is true, if you had lower flows you would have  
20 decreased bromite levels.

21 MR. BUCK: But that doesn't include the  
22 influence of the tides. If you look at how much water is  
23 available in the influence of tides, there's not enough  
24 water available in all of the reservoirs of California to  
25 flush out bromide in the dry periods or even the wet

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1 standard that, you know, perhaps we can't comply with  
2 because of conditions of the, and you know, as part of the  
3 discussion I would like to see what types of timelines are  
4 you looking at for the Stage Two. To me four years is  
5 very, very close and there would be a lot of retrofit, a  
6 lot of things that needs to be done so much before that.

7 MR. MEZGER: Well, the compliance date  
8 actually that is I think was generally mentioned. The  
9 compliance date actually would likely be five years after  
10 that. The time there is I think a couple of years for  
11 states to adopt the regulation themselves and then -- or  
12 its equivalent, and then three years for assistance, two  
13 additional years beyond that to put what -- make whatever  
14 changes are necessary to comply.

15 Again, I would emphasize that the Stage One  
16 process is shown the way in which bringing these  
17 compliance concerns to the table during the formulation of  
18 the rule itself has led to a number of refinements and  
19 adjustments that make compliance a great deal more  
20 feasible under current treatment trains and so there's  
21 no -- every reason to expect that that kind of  
22 responsiveness is going to continue in the future.

23 Obviously if the standards are set at a  
24 substantially more stringent levels that's is going to be  
25 more demanding although, again, the affordable

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1 considerations kicks in there, but equally we're --  
2 because of the health effects and the research that's  
3 going on we're genuinely wide open as to where these  
4 numbers are going to go, and there's no reason to expect  
5 one outcome any more than another.

6 We have already been surprised in the Stage  
7 One process by some of the things we found, and in terms  
8 of things that we thought were risky treatment practices  
9 that we thought were potentially inadequate that proved to  
10 be fully implementable on a continuing basis to comply  
11 with the standard. So it is not a process that perceives  
12 oblivious to these kinds of considerations by any means.

13 MR. MADIGAN: All right. Bob.

14 Thank you very much. Diversion effects on  
15 fisheries.

16 Thank you, sir.

17 Lester. Where did he go? He had to step  
18 out for a minute.

19 Pete, do you want to tell us what we actually  
20 needed to know anyway?

21 MR. CHADWICK: Lester wanted to kick this off  
22 and try to move through it very quickly.

23 In your report the package today is an  
24 analysis of impacts on fisheries and the various  
25 alternatives, and that report describes the IDT results,

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1 puts them in perspective in relation to the common  
2 programs and summarizes diversion effects, Delta flow  
3 circulation effects and brackish water habitat effects, all  
4 of which are distinguishing characteristics of what we  
5 have talked about in the last few meetings.

6 Lester was going to jump right to the slide,  
7 and we go through the common programs and make the point  
8 that there are very important components of the common  
9 programs that don't directly relate to these three  
10 distinguishing characteristics. One part of the common  
11 program, though, that does -- is directed towards  
12 minimizing diversion effects on fisheries, and we have  
13 estimated that that common program component gives you an  
14 increment above the existing conditions and no action that  
15 is about equal to the additional increment that you get  
16 with alternatives two and three, and then a substantial  
17 additional increment for alternative three.

18 Alternative two is diminished value and  
19 relation to some of the others in our view because of this  
20 issue that we are dealing with with passage that with  
21 alternative two there is a fishery and pumping plant, it's  
22 a through Delta component, and the difficulty of getting  
23 fish through that. We talked about that last time if you  
24 remember.

25 The increment that you get from alternative

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1 three is driven not by salmon from the Sacramento River.  
2 Our analysis indicates that alternatives one, two and  
3 three are quite similar in terms of benefits for salmon.  
4 The big increment is due to salmon coming out of the San  
5 Joaquin River and effects on them to striped bass, to  
6 Delta smelt, to split tail, those fishes that use the San  
7 Joaquin Delta.

8 MR. MADIGAN: Pete, hang on a second here.

9 MR. SNOW: What do the lines represent.

10 MR. CHADWICK: The lines are just to give you  
11 relative, relative differences. These -- they are not  
12 translatable directly to specific population numbers or  
13 something like that. It's a scale of relative differences  
14 among the various alternatives and conditions.

15 MS. McPEAK: We don't know what the scale is.

16 MR. MADIGAN: If the top line is 100 percent,  
17 does that mean that the existing conditions are about two  
18 percent as satisfactory --

19 MR. CHADWICK: They are about --

20 MR. MADIGAN: -- or does that mean that 20  
21 percent of the fish are going to --

22 MR. CHADWICK: They are -- it's an  
23 intext-type thing so that if this is 20 percent of that,  
24 it's -- there is a five times -- you know, it's five times  
25 better. It's just a relative scale.

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1 MR. MADIGAN: Okay.

2 MR. CHADWICK: And we're not contending that  
3 we can put numbers on the time.

4 Let me -- let me back up a minute and go back  
5 to the paper in the beginning. We make the point that  
6 these reflect professional judgments of relative value.  
7 What we all would really like is to put it in perspective  
8 across all of the various elements of a common programs  
9 and the alternatives to come up with a number of  
10 population levels of fish that. You know, the knowledge  
11 to do that does not exist. So what we are -- what we  
12 think we can do is make some reasonable professional  
13 judgments about relative values of the nature that we have  
14 and we can't -- we can't take the stuff that you would  
15 really like.

16 MR. HESSELTINE: So there's really no measure  
17 of it is what you're saying.

18 MR. CHADWICK: Pardon?

19 MR. HESSELTINE: There is really no measure  
20 of the difference between the alternatives. There is no  
21 measure. There is no way to measure it. You can't  
22 quantify it; right?

23 Well, let me ask a question a different way.  
24 Out of all of the fish that are in the Delta of a  
25 particular population, are there any numbers on what

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1 percentage are estimated to be lost as a result of  
2 entrainment? I mean --

3 MR. CHADWICK: Yes.

4 MR. HASSELTINE: I mean do 10 percent of the  
5 fish get into training, 2 percent, 80 percent, what?  
6 Because if we are looking at differences between 2 to 10  
7 percent then it's -- this may not be a big deal.

8 MR. CHADWICK: Okay. Those of us in the  
9 fishery agencies believe we are talking about effects that  
10 have substantial population level effects on the  
11 populations. Lester, for example, as a example here,  
12 Lester is asking the question of given these levels of  
13 effects on Delta smelt, for example, can the population  
14 recover without making some of these improvements? The  
15 technical folks have not attacked that and provided an  
16 estimate yet. That is one of the -- that is one of the  
17 steps that we need to take here would want to -- that is  
18 going to be one of the steps that we are going to be  
19 taking between now and the fall.

20 MR. CHADWICK: One of the issues that has  
21 been brought up several times today that is of  
22 considerable significance is brakish water habitat which  
23 translates really to the magnitudes of Delta outflow. We  
24 showed this I believe last time, there are relatively  
25 small differences in average levels of Delta outflow that

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1 alternatives are going to be strongly dependent upon  
2 operational criteria.

3 We had discussion with the State Board about  
4 that everybody acknowledge that is this is a very large  
5 issue. I think we are all absolutely convinced that it  
6 has to involve stakeholders and a very serious discussion  
7 over the next six months, and while the ultimate details  
8 are a Phase Three activity, I would be very surprised if  
9 any of agencies or stakeholders are comfortable moving  
10 past Stage Two without a more substantial exploration of  
11 the operational alternatives. There needs to be wider  
12 consultation within the agencies and within the science  
13 panel on these findings of the IDT for peer review and  
14 between now and the completion of the EIR this fall. Let  
15 me stop there.

16 MR. MADIGAN: Byron.

17 MR. BUCK: Pete, in the paper you talk about  
18 the fish screens for Alternatives Two and how they become  
19 a barrier to fish migration going the other direction or  
20 upstream but that there is a possibility for building fish  
21 passage facilities. How difficult would you say -- it's  
22 kind of an abstract question -- to build fish passage  
23 facilities when you have a whole variety of species when  
24 you've got slow swimmers, fast swimmers, ones that jump  
25 very well and others that don't, to accommodate all of the

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1 are associated with between the difference between no  
2 action and the alternatives with storage, that and these  
3 differences also are not related to the alternative.

4 There is a widespread perception that there  
5 are big differences between alternatives one two and three  
6 in this regard and the analysis shown today for the  
7 operating criteria and place indicate that there are  
8 really very small differences between alternatives and in  
9 fact there are small differences between no action and the  
10 alternatives despite the fact that there is about a 14  
11 percent increase in exports over existing conditions with  
12 these alternatives.

13 This analysis needs to be followed up with  
14 additional analysis of annual variations and flow and to  
15 see whether that -- to see whether there are some years in  
16 which the effects are significant.

17 Let me finish with a slide on where we're  
18 going from here. We need a more thorough analysis of  
19 things like variations in flow between years and that type  
20 of thing.

21 A really critical thing that we need between  
22 now and the fall is to explore a wider range of operations  
23 for the various alternatives. IDT explored a narrow set  
24 of differences on operations. We have had several  
25 references today to the fact that the impacts of these

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1 species that would have to get past those screens which  
2 are now barriers going the other direction?

3 MR. CHADWICK: There was a panel that was put  
4 together that included both agency and outside experts  
5 that were put together to look at this question as well as  
6 the total of the fish screen issues. They reached the  
7 conclusion that this was something that there were  
8 reasonable ways to solve but there are real risks  
9 involved. It is a -- and it is the primary reason why  
10 those of us in IDT ranked Alternative Two low, no  
11 significant increase over Alternative One was because of  
12 that risk which we feel is really significant that we  
13 would have some we would have some serious losses  
14 associated with that.

15 MR. MADIGAN: Okay. Thank you. Thank you.  
16 Pete.

17 I am sorry, Pietro. Sure.

18 MR. PARRAVANO: After reading the draft  
19 document it seems to me that in every -- in each of the  
20 alternatives there is nothing positive about it that shows  
21 that either three, each of the three alternatives would  
22 address the current problems that the salmon have for  
23 migration both in migration and out migration. The only  
24 thing that they do compare is that the relative  
25 Alternative One states that it would tend to increase

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1 existing adverse entrainment effects of the CVP and  
2 statewide projects.

3 Alternative Two would also include some  
4 negative consequences.

5 Alternative 3 would also include some  
6 negative consequences.

7 I think that based on reading this that this  
8 conflicts with the objective of CALFED, and that the idea  
9 afflicted with CALFED is to better the system that we have  
10 currently. And seeing and reading this draft document it  
11 seems like we're are going backward.

12 MR. CHADWICK: Okay. And that is the point  
13 where the draft is discussing for smelts migrating out of  
14 the Sacramento River the relative differences among the  
15 three alternatives. Part of the context there is that by  
16 closing the Delta cross-channel gates we've have made  
17 substantial progress. Those smelts that get diverted into  
18 the central part of the Delta have a survival rate there  
19 one-third to one-half of those that stay in the Sacramento  
20 River, and by closing the Delta cross channel we have  
21 substantially reduced that problem. We are left with the  
22 fact that there are times when portions of the salmon run  
23 are coming downstream when it's not feasible to keep the  
24 Delta cross channel gates closed, and that will continue  
25 to be a continuing source of issue with alternative if

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1 also. I think you can lose sight of the fact that even  
2 though one increase the restoration on the habitat for the  
3 fish, they still have to go through the same program and  
4 this is that they have to go passed those pumps, and  
5 unless the conditions are bettered that these pumps you're  
6 still going to have the same mortality rate and the same  
7 type of entrainment regardless of how improved the habitat  
8 is on the restoration programs are successful.

9 Entrainment is very much a part of the life  
10 cycle or part of the migratory path of the salmon, and  
11 unless those issues are bettered, I don't see these  
12 alternatives flying.

13 MR. CHADWICK: Well, okay. That is -- that's  
14 part of the dialog that needs to continue to take place.

15 MR. MADIGAN: Alex, briefly.

16 MR. HILDEBRAND: I would like to go back to Eric's  
17 question here about the significance of these differences  
18 among different alternatives. In order to understand  
19 that, I think we need to break down a bit. You indicated,  
20 I believe that those differences had nothing to do with  
21 Sacramento fish. They had to do entirely with San Joaquin  
22 fish, and those fish are not a big percentage of the  
23 totals so I don't understand how you get these gradations,  
24 and I would like to see your judgment as to the percentage  
25 difference in survival in each of the principle specise of

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1 Alternative One is implemented.

2 But you're correct that we make the point  
3 there that there are some issues for those salmon with  
4 Alternatives Two or Three also and therefore not a major  
5 difference among them, but to back up and take the broader  
6 view, that discussion percentages to the entrainment  
7 effects, and other places in the paper we point out that  
8 there are substantial benefits should be realized for  
9 those fish from the overall program, the upstream  
10 restoration portions of it, the improvement of habitat in  
11 the Delta which should be valuable for the fly salmon that  
12 come down and grow in the Delta, that we have created  
13 better conditions for them. Both through the habitat and  
14 the flow distribution effects offer some significant  
15 advantages, and then also keep in mind that that portion  
16 of the paper is talking about salmon smelts out of  
17 Sacramento, and as I pointed out earlier, salmon smelts  
18 out of San Joaquin have very major differences in affects  
19 based on Alternatives One, Two and Three that certainly  
20 need to be considered in evaluating those alternatives.

21 MR. MADIGAN: Okay. One more question.

22 MR. CHADWICK: We believe -- I appreciate the  
23 interpretation but we believe that there are substantial  
24 benefits for salmon in the programs.

25 MR. PARRAVANO: Right. I can appreciate that

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1 concern in the San Joaquin separate from the rest, and in  
2 looking at that we also need to know what assumptions,  
3 management assumptions go into it. Do you have the  
4 barriers in place when you make your evaluation? What  
5 export pump rights do you assume to occur during the  
6 out-migration period? What flows do you assume you are  
7 going to have of Vernalis .

8 So you have a page here on the ERPP, and it's  
9 the last page in the section titled Ecosystem Restoration  
10 Program which calls for ten day pulses which I take to be  
11 superimposed on some background flow, and those ten day  
12 pulses you have nine or 10,000 CFS superimposed on the  
13 flow. I don't know where you are going to get that kinds  
14 of flow, so we need to have a better understanding of what  
15 assumptions went into this and how -- what is your  
16 judgment is the effect on each of the varieties of San  
17 Joaquin fish that didn't get in with other fish that you  
18 tell us would not be effected anyway.

19 MR. CHADWICK: That is part of what I -- the  
20 last slide on the need to explore a range of operating  
21 criteria feeds into that, Alex, I agree.

22 MR. MADIGAN: Okay. Thank you. Thank you  
23 very much. Pete. The last. Significance on the agenda  
24 this afternoon is the restoration coordination program,  
25 1998 funding package status. Cindy is going to do that

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1 but Mary is going to introduce it with her usual legal  
2 caution about these matters. So I think that we should  
3 pay attention.

4 MS. SCOONOVER: I'm here to once again remind  
5 you of the State laws involving any conflict of interest  
6 that prohibit members of a body from both having an  
7 interest in a contract in a personal sense as well as  
8 being asked to approve it in a professional sense. And we  
9 have dealt -- there are a number of memos that I have sent  
10 you all and we can talk about it in greater detail  
11 probably outside of this meeting if you want to discuss it  
12 further.

13 This will be your opportunity to weigh in on  
14 certain programs that are listed in your packet that Cindy  
15 is going to be talking to you about today. So there we  
16 will handle this the same way we handled this last time.  
17 If you have an interest, a financial interest in any of  
18 the financial applications that are listed in the  
19 materials for today, I would ask that you note the  
20 interest and abstain from participating in the rest of the  
21 discussion today.

22 MR. MADIGAN: Thank you, and Judith who has  
23 so noted and abstains herself from the discussions.

24 The same, likewise, Mary. Thank you. Mike  
25 Stearns. Mike.

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1 continue to use the same priority species that we used in  
2 the '97 RFP, and those are basically arranged into primary  
3 and secondary and first tier and second tier. This is  
4 actually the priority species list for category three  
5 AVCPPIA that the decision was made to continue on with  
6 those same priorities.

7 We were funding projects -- we are funding  
8 projects in three different ways. The first way that we  
9 are funding projects is there were a number of proposals  
10 remaining from the '97 process that were high quality and  
11 we had interest in funding them and that is what we are  
12 going to be talking about today. We also have some  
13 actions that we need to take to fill some of the gaps that  
14 remained off the '97 RFP, and we are going to be bringing  
15 additional information forward at a future date on what we  
16 are calling focus grants and designated actions. The  
17 focus grants would be very focused solicitations for  
18 additional proposals to meet needs that we don't have any  
19 goods proposals and the designated action would be  
20 something where it's clear there is one party out there to  
21 do it and we need to deal with that party to take that  
22 action.

23 Those will be coming being forward in the  
24 future, but what we are focusing on today are three  
25 recommendations. In your package there are actual

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1 MR. FLOYD: I might be adversely effected by  
2 something that I don't know about yet.

3 MS. SCOONOVER: No, it's specifically a  
4 financial interest. If you stand to benefit financially  
5 from or if you have a financial interest in the program  
6 that will be the subject of a contract, that will be  
7 issued then under this law which is Government Code  
8 Section --

9 MR. HILDEBRAND: I am impacted by it rather  
10 than profitted by it.

11 MARY: That is not effected.

12 MR. MADIGAN: Mike Stearns also declares the  
13 possibility and so abstains himself. Cindy, you're on.  
14 Thank you, counselor.

15 I don't think your on.

16 MS. DARLING: Okay. At the collusion of the  
17 funding round in December when 60 million dollars in  
18 projects were announced, we had these remaining funds. We  
19 had some additional category funds from Prop. 204. We had  
20 a portion of the FY '98 Federal appropriation, some funds  
21 that are in EPA's budget and some remaining funds from the  
22 State Board of Contributions being held by CUA. Total of  
23 22 million dollars.

24 We have been working on several projects to  
25 fund from that pot of money. The decision was made to

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1 proposals. If you look at the package there is actually a  
2 list and it includes 21.6 million dollars in proposals to  
3 be funded, and we are also asking for approval of some  
4 contingency and administrative funds. The ecosystem  
5 roundtable consider the 21 million proposal as had the  
6 CALFED management team and basically recommended that  
7 those be approved, and we wanted to come here today to  
8 find out -- to present them to you and seek your input and  
9 comment on those proposals, and then for each proposal  
10 there is a summary, and then the executive summary put  
11 together by the applicant because I am sure that you have  
12 read these and spent a lot of time looking at them. I  
13 want to run through an overview of what is in the package.  
14 As you may remember, we had certain ecological  
15 stressors that we were looking to fund actions to address  
16 this gives you a breakdown by the dollar amount of what we  
17 are addressing, and as you can see it's once again a  
18 balance with a lot of efforts going into floodplane,  
19 marshplane and river channels.

20 We have a fair amount more going into water  
21 quality than we did the last round, and we are also  
22 working on entrainment barriers, traditional fish passages  
23 and fish screening facilities that will give you an idea  
24 of the geographic distribution.

25 One thing that was noted by CALFED management

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1 team, this little item up here in the top North Bay has  
2 zero funding in the package that is in your BDAC package,  
3 and the CALFED management policy team looked at that and  
4 deliberated on it as had the roundtable, and the  
5 management team identified several principle that would  
6 guide some additional considerations, these are policy  
7 level principles. They wanted to work on some refuse of  
8 grudge material demonstration projects and do some  
9 additional work at bringing information on the North Bay  
10 into the CALFED program and furthering watershed  
11 stewardship as well as working more on what is the  
12 importance of North Bay's part of CALFED ecosystem  
13 program. These were discussed at the policy team meeting  
14 by CALFED on Monday, and they lead you to include these  
15 five projects in addition to the 21.6 million dollars that  
16 are in the BDAC packet.

17 The first one is completion of the Regional  
18 Project, it's a planning process that is being used to  
19 support the ERPP, Hamilton Restoration Project which is  
20 a -- will involve use of dredging materials, and there is  
21 two stewardship projects, one on the Napa River, one on  
22 Sonoma Creek as well as an acquisition the Napa River. So  
23 the policy team is recommending approval on these packages  
24 in addition to the 21.6 million dollars and funding these  
25 does not preclude any of the things that we have talked

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1 this money wisely and we are also I think a little curious  
2 to see how in comes out because we would like to so how  
3 far that goes and what goods it might do and using it as  
4 an analog it use it for future purposes that provide flows  
5 that are implicated in the program. This would be an  
6 interesting test case to see what happens, and see how  
7 much you get for the twenty million.

8 MR. MADIGAN: Cindy, you heard Byron's  
9 comments. Do you have any thoughts today.

10 MS. DARLING: We are not asking for approval,  
11 obviously --

12 MR. MADIGAN: Right.

13 MS. DARLING: -- of these designated actions  
14 because there is significant amount much staff work as  
15 well as work with the stakeholders technical community on  
16 these that needs to occur, but just to give you a sense of  
17 where the water acquisition water idea came from, in the  
18 '97 RFP that was driven by the Category three funds in  
19 prop. 204 that do not allow basically those non-overflow  
20 related measures, when we got the met Federal funding  
21 there was a discussion about whether or not that included  
22 water acquisition or not, and there the interpretation  
23 that I am getting at this point is that water acquisition  
24 is allowed under the federal funds but it has to go  
25 through the decision-making process. The integration

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1 about funding out of this and the policy felt was  
2 important to move forward with these. So that is an  
3 overview of what we are asking for your comments on today.  
4 I would be happy to answer any questions or --

5 MR. MADIGAN: Questions by members of the  
6 board? Byron and then Alex.

7 MR. BUCK: I am wearing my ag urban hat on  
8 this one. My understanding of how these projects come  
9 about is really grass roots approach that there are  
10 proposals from the interest stakeholders or groups that  
11 have ideas on restoration as well as perhaps things coming  
12 from staff but referring to the table and the lists of  
13 projects page number 32, water acquisition, 20 million  
14 dollars. I understood it did not come to the normal up  
15 grassroots process but this was brought in by the  
16 integration panel responsible somewhat at the end of the  
17 process.

18 Without speaking to the merits of it, I think  
19 we are real interested in knowing how it got, and then how  
20 much water do we think we are going to get from it, where  
21 is it going to appear in the system and when and you  
22 probably would have answers to all of those questions now  
23 but I think to highlight it, we are concerned about the  
24 process that I have got here in the first place we are  
25 concerned that there process to determine how to spend

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1 panel when they were meeting and talking about their gaps  
2 they said, well, one of the most obvious gaps is the  
3 highest priority stressor that we have identified is  
4 alterations to the hydrograph.

5 We have no proposals before us because the  
6 '97 RFP specifically said that was for non-flow related  
7 measures. So we are recommending that a block of money be  
8 set aside and people consider this whether or not we can  
9 develop this kind of program and this given the magnitude  
10 of funding that has gone with the other stressors they  
11 felt that this was an appropriate range of dollars to be  
12 considered for this but there is an awful lot of work that  
13 still needs to be into this and it's definitely something  
14 that we are going to continue to discuss.

15 MR. MADIGAN: Alex.

16 MR. HILDEBRAND: My question was also about  
17 the twenty million dollars and I don't care for water  
18 acquisition, but in addition to Byron's questions I want  
19 to know how you are going to buy all of that without a lot  
20 of third-party impact acquisitions that the bureau has  
21 been making, have a lot of third-party impacts, and I am  
22 very dubious that you can combine such quantity water  
23 without quite a bit of third-party impacted. You go ahead  
24 and do it and Phonzy, [ph.], and the people are going to  
25 be impacted before they are even notified. So I'm quite

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1 concerned about having any such amount of money thrashing  
2 around here without a lot of scrutiny.

3 MS. DARLING: Yes. We are working with the  
4 stakeholders ecosystem roundtable to work through some of  
5 the issues related to third-party impacts and other  
6 impacts to the water market

7 MR. HILDEBRAND: I'm not sure the equal  
8 personnel of the roundtable are particularly qualified to  
9 recognize the third-party impacts.

10 MR. MADIGAN: Okay. Thank you.  
11 Stu, you have about a minute.

12 MR. PYLE: I would like to make some comment  
13 on both the '97, '98 program things that I think that I  
14 can support things that I would have some questions about,  
15 but I think I have already expressed myself here that I  
16 think there needs to be wide public input on the approval  
17 process for these and I am not that sure that we have  
18 really gotten there. I understand that it's been  
19 explained to me many times that it's because of the State  
20 bidding regulations on this and so forth but a lot of  
21 these in going through these descriptions of the programs,  
22 a lot of them I think are excellent programs, particularly  
23 those that take immediate action such as fish streams or  
24 whenever they are needed restorations on specific  
25 properties to attempt to bring about some planned

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1 improvement in the ecosystem. I think that those are  
2 really good.

3 I have some questions in the proposals about  
4 large programs or programs with large funding that are  
5 essentially for scientific studies. If those programs are  
6 budgeted through the agency organization that is doing  
7 that through it's normal channels and its budget for that  
8 purpose, I think that is just fine if there is a tendency  
9 to divert funds which are otherwise scheduled for some of  
10 the actual restoration programs and projects in there, I  
11 would much rather see that type of discretionary money  
12 going to the programs and the projects rather than going  
13 to the scientific studies, and I think the bodies doing  
14 the scientific studies and awarding them independent  
15 researcher studiers should be dependent upon a budget for  
16 that source and not as hard fought money which comes from  
17 bond issues and that type of thing just going to support  
18 scientists doing studies which may or may not result in a  
19 positive effect to the program.

20 The other comment that I would have is about  
21 the purchase of land that -- there are several large land  
22 purchase programs in there and they certainly take up a  
23 lot of the funds by the time you spend a million and a  
24 half dollars purchasing some segment of land here or there  
25 you could have done an awful lot of other specific action

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1 someplace throughout the basin that I think would probably  
2 bring more immediate results, so I would like to see  
3 somehow these programs that are adopted and put into  
4 action at this time related somehow to the long-term plan,  
5 the interim plan and the long-term plan so that we are not  
6 just picking and choosing and particularly so we are not  
7 buddying-up either with somebody who's offering or trying  
8 to sell some land and somebody who has an idea for that or  
9 with some study group. Those are my down sides.

10 One other thing, let me say that I think is  
11 excellent in these is where I see programs that are  
12 established with some type of partnership either for a  
13 joint funding or joint scientific processing, reviewing  
14 monitoring and so forth. I think the more joint activity  
15 that you can get to bring people on the site and involved  
16 in that share of the ecosystem I think is going to benefit  
17 everybody in the long wage.

18 MR. MADIGAN: Okay. Thank you. Bob.

19 MR. MEACHER: Okay. Real briefly. My folks  
20 feel that we just WENT through a similar exercise on this  
21 waters acquisition program with the DWR supplement  
22 Purchase Program. Maybe they are not the same but I think  
23 that it needs a lot more work by the ecosystem roundtable  
24 folks. My people have told me that they haven't had a lot  
25 of discussion on this, maybe there has been but that it

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1 needs to have a lot more, and that is it in a nutshell.

2 MR. MADIGAN: Lester, do you want to wrap it  
3 up or is it wrapped?

4 MR. SNOW: I think it's wrapped. We got what  
5 we needed on this issue; right, Cindy?

6 MS. DARLING: Yes, and I appreciate your  
7 help.

8 MR. SNOW: Good. Thank you very much.

9 MR. MADIGAN: All right. The next item on  
10 the agenda is the continuation of the Chair's report. I  
11 all received a copy of the calendar for March 1998. To  
12 the extent that each of you has a problem with the  
13 calendar, please call Robin Jenkins if there is sufficient  
14 problem with one, we will take a look at it. Otherwise,  
15 that is where we will be this year.

16 The last item on the agenda is public comment. I  
17 only have one request for public comments and that is from  
18 Martha Miller. Martha, do you want to come on up.

19 MS. MILLER: Okay. Just some quick observations.  
20 Number one, in the Mr. Dunnigan's comments about misuse of  
21 facilities, since I am in Sacramento we certainly have had  
22 problems in that realm, but that also brings up the point  
23 that if you are looking for some trustworthy mechanisms to  
24 instigate some restoration and improvement in the Delta,  
25 certainly it would be through making the local cities

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1 spend their redevelopment dollar like we have had to  
2 spend, millions upgrading our water system so that we are  
3 not double taxing, the taxes pairs and bypassing bonds  
4 issues that are going to show up in taxes bills and other  
5 ways, putting a little pressure on the local politicians.  
6 If you're going to make board that is equal, make it of  
7 all of the mayors and city counsel people so that  
8 everybody has some equal comment, and since the Delta  
9 water does come from up north the stakeholders aren't like  
10 Buffy the Vampire thing trying to kill off each other, the  
11 taxpayers would just like to see some tangible things.  
12 Like Mr. Pyle said, we don't want studies done with a  
13 couple billion dollars before we see any maturation  
14 of dams and some air and water improvements.

15 And when you are talking about correcting the  
16 bromide problem which is a natural thing. There needs to  
17 be some looking at the fact that Mercury and some other  
18 things like that in the Methanol that is dumped by Procter  
19 and Gamble and a few other companies, the permitting  
20 process that allows pollution to go on that some of the  
21 process going on with the Water Quality Boards that never  
22 gets corrected that we include in here triggers, triggers  
23 the deal with already existing man-made pollution problems  
24 as opposed to the ones that are in nature and start a  
25 correction at the local level using their root of

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1 of the interest groups that we really like to see in some  
2 of the other programs, and I think that the turning point  
3 in the ERPP was the convening of the science review panel,  
4 and it enabled all of the stakeholders to kind of get  
5 beyond the positioning and get through to some facts and  
6 with some goods solid facts, that was a breakthrough that  
7 allowed some common interest to emerge, and I think that  
8 we can.

9 I heard it referred to a number of times  
10 today that in a couple of areas we are going to start  
11 putting some of these science panels together to do peer  
12 review, and I think that that is really a positive step  
13 and I would like to see it applied more widely, and I  
14 think that it will help us in the future, but I did not  
15 want us to walk away without at least feeling good about  
16 the really significant progress that we are making on the  
17 Ecosystem Restoration program.

18 MR. MADIGAN: So some good solid facts can  
19 really get in the way of some long-held opinions

20 MS. NOTTHOFF: I think it helped.

21 MR. MADIGAN: All right. On this positive  
22 note, we are adjourned. We will see you all in March in  
23 Los Angeles. Thank you. You have been a remarkably  
24 durable group.

25 [Whereupon the meeting was adjourned]

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1 development money and getting the public a little more  
2 educated and they will respect and trust you a little bit  
3 more because they see there is the quality at making  
4 people responsible for their local level first.

5 MR. MADIGAN: Thank you very much.

6 All right. I have no other requests. That  
7 is the last item on the agenda. We have continued the  
8 Ecosystem Restoration Program to next month and Ann  
9 Hotthoff has asked to make a statement this afternoon.  
10 Ann.

11 MS. HOTTHOFF: I have been prepared to talk  
12 about the report that was on the agenda but I just wanted  
13 to end maybe on a positive note here and say that I really  
14 think that the Ecosystem Restoration Program Plan is  
15 making remarkable progress. With the first draft that  
16 came out there that kind of generated a multi-party  
17 stakeholder group that has been advising our work group  
18 and they have already come to, you know, really very  
19 exciting agreement on draft outline of a strategic plan  
20 for the ERPP. They have agreed to a process and they have  
21 also agreed to a list of participants, a list of names for  
22 blue ribbon panel of scientists that will help put this  
23 thing together.

24 I just wanted to point this out because I  
25 think that this is the type of process in coming together

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STATE OF CALIFORNIA                    }  
COUNTY OF SACRAMENTO                } ss.

I, the undersigned, a duly qualified Certified  
Shorthand Reporter of the State of California, do hereby  
certify:

That the proceedings in the foregoing transcript  
were held on Thursday, January 29, 1998, at the  
Sacramento Convention Center, 13th and K Streets,  
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That said proceedings were taken before me as a  
Certified Shorthand Reporter at the time and place  
and were taken down in shorthand writing by me;  
That I am a Certified Shorthand Reporter of the  
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That said proceedings were thereafter transcribed  
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said action.

IN WITNESS WHEREOF, I have hereunto subscribed my  
hand this 10th day of February, 1998.

Patricia A. Hernandez, CSR #6875

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